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ABSTRACT

The curriculum guide, one of a series prepared to assist teacher-coordinators in promoting and teaching home economics cooperative education programs, provides a course of study for the dietetic aide occupation. In addition to a brief overview, job description, and job analysis of the occupation, the guide's four main sections are: instructional materials for students, answer sheets for study questions, unit tests, and answer keys for unit tests. For each of these sections the guide covers the following 12 topics in a unit format: what is a dietetic aide, dietetic aides as members of the dietary teams, diet therapy, small equipment for food preparation and service, large equipment for food preparation and service, large equipment for cooking food, techniques of food preparation, food preparation, fundamentals of food service procedures, safety, sanitation, and basic skills in management. Each unit provides objectives, tasks, work experiences, and study assignments. (JR)

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DIETETIC AIDE

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DESCRIPTION OF
HOME ECONOMICS INSTRUCTIONAL MATERIALS CENTER

The Home Economics Instructional Materials Center was established September 1, 1967, as a continuing project. It is a cooperative project between Homemaking Education in the Texas Education Agency, and the College of Home Economics, Home Economics Education Department, Texas Tech University at Lubbock, Texas. The instructional materials developed at the Center assist teachers and coordinators in promoting and teaching home economics gainful employment programs and homemaking education.

To provide a background of information for the establishment of the Home Economics Instructional Materials Center, a Planning Grant Project was approved by the Texas Education Agency for February 1 through August 31, 1967. The major purposes of the Planning Grant Project were (1) to assemble and catalog an occupational reference library, (2) to develop procedural steps for preparation of instructional materials, and (3) to illustrate the first sequence of these steps, that is, to develop job analyses and to list competencies needed for employability.

The present major objectives of the Home Economics Instructional Materials Center are (1) to develop instructional materials for students enrolled in cooperative part-time training programs and pre-employment laboratory training programs, (2) to develop materials in homemaking education, and (3) to develop at a later time materials designed for use in home and community service programs.

Acknowledgement is given to the following persons:

Mrs. Elizabeth F. Smith, Director, Homemaking Education, Texas Education Agency, who conceived the original plan for establishing the Center and continues to determine ways in which the Center can meet the needs of homemaking education in Texas.

Dr. Camille G. Bell, Chairman, Department of Home Economics Education, who continues to serve in an advisory capacity.

Linda Glosson, Director
Betty Robinson, Associate Director
Vicki Reid, Assistant Director

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The course of study for Dietetic Aide, prepared by the Home Economics Instructional Materials Center at Texas Tech University, is the result of the combined efforts and ideas of many people, namely:

Mrs. Sue Day, Abilene, Texas, and Mrs. Dorothy Maloy, Midland, Texas, Home Economics Cooperative Education Teacher-Coordinators, who spent one month at the Center helping with the writing of the original Dietetic Aide instructional materials.

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The advisory council for Dietetic Aide which consisted of

Mrs. Roe Bauvasett, Consulting Dietitian and Food Service Supervisor, University Convalescent Center
Mr. Joe Holmes, Manager, Central Food Facilities, Texas Tech University
Mrs. Leta Smith, Registered Dietitian, Methodist Hospital

all of Lubbock Texas, who aided in identification of tasks for the job analysis and content for the course outline.

COURSE OF STUDY
FOR
DIETETIC AIDE

This course of study is one of a series available to assist teacher-coordinators in promoting and/or teaching home economics cooperative education programs. The following are other courses of study in the series:

- Child Care Aide
- Clothing Assistant
- Food Service Employee
- Home Furnishings Aide
- Housekeeping Management Assistant

A course of study consists of (1) an overview and job description, (2) a job analysis, (3) a course outline, (4) instructional materials for student use, (5) unit tests, and (6) a list of references required for use with the instructional materials.

Developmental Procedures

The course of study for Dietetic Aide is based on the job analysis included in this set of materials. The job analysis was developed from interviews with employers and employees in patient food service operations. The proposed course outline for teacher use (which grew out of the job analysis) served as a guide for writing the instructional materials for student use. During the development of the course outline, advisory committee meetings were held to review and edit the working materials. Experienced home economics cooperative education teacher-coordinators and subject-matter specialists aided in writing the student materials.

The job analysis may be used for interviews with employers and employees to survey the tasks performed by entry-level employees in food service in the local community. Results of the interviews can then be used as a basis for writing the training plans for each student.

The proposed course outline relates the tasks to the general objectives and competencies needed by students to perform effectively on the job. The competencies listed as "work experiences" are to be gained primarily from on-the-job training, while those listed as "study assignments" are to be gained from classroom experiences.

Student Edition

The student instructional materials in the course of study are designed to provide part of the classroom instruction and are designed to give students an increased understanding of the tasks they will perform on the job. This section is also bound separately for student use.

Since students in any one class may be employed in a variety of occupations, the instructional materials have been developed to be used for individual study with a minimum of assistance from the teacher-coordinator. The materials are designed so that students may begin with any unit and proceed through them in any order. Beginning with the units most closely related to their jobs and then going back and studying the rest of the information will aid students in seeing the relevance of the instructional materials to their specific jobs.

Each topic in the instructional materials begins with the task to which the topic is related and a statement of behavioral objectives. For some topics, information sheets are provided, and for other topics, reading assignments in related texts and pamphlets are made. Study questions, assignments, and suggestions for group work follow the information sheet for each topic. The study questions provide an opportunity for the student to check his understanding of the information presented. The teacher-coordinator may wish to check the answers to the questions, or she may suggest that the student check his own work and then turn the work in to her. Group work is suggested to provide opportunities for students to work together on specific projects and problems.

Teacher's Edition

Answers to study questions, unit tests, and answer keys are included in the teacher's edition of the course of study, but they are not in the separately bound student copy of instructional materials.

Reference materials essential for use with the course of study are listed on page 407. These books and pamphlets must be secured and made available for student use. An effort has been made to select references which will adequately cover the materials and provide up-to-date information related to the job.

A more comprehensive reference list is included in the Guidebook for HECE Occupational Areas. Additional references should be selected from this list to enrich the instructional materials, to provide specialized information for specific types of jobs, and to meet the needs of advanced and second-year students. Learning to use a variety of references will aid the student in becoming a more knowledgeable and flexible employee.

TABLE OF CONTENTS

Page

DESCRIPTION OF HOME ECONOMICS INSTRUCTIONAL MATERIALS CENTER iii

ACKNOWLEDGEMENTS iv

COURSE OF STUDY FOR DIETETIC AIDE
INTRODUCTION TO THE TEACHER. v

OVERVIEW . . . . . (1)

DIETETIC AIDE JOB ANALYSIS . . . . . (3)

COURSE OUTLINE . . . . . (7)

INSTRUCTIONAL MATERIALS FOR STUDENTS

WHAT IS A COURSE OF STUDY?
(INTRODUCTION TO STUDENTS). 3

UNIT I. WHAT IS A DIETETIC AIDE?

I-1. The Dietetics Profession 7
I-2. Personal Characteristics 11

UNIT II. DIETETIC AIDE: A MEMBER OF THE DIETARY TEAM

II-1. Laws, Policies, and Regulations. 15
II-2. Interpersonal Relationships. 19
II-3. Self-evaluation. 27

UNIT III. DIET THERAPY

III-1. Dietary Problems of the Sick and Aging 31
III-2. The Basic Four Food Groups 35
III-3. Nutrients. 43
III-4. Nutrition for Persons of Various Ages. 47
III-5. Planning Nutritious Meals. 51
III-6. General and Therapeutic Diets. 59

UNIT IV. SMALL EQUIPMENT FOR FOOD PREPARATION AND SERVICE

IV-1. Hand Utensils. 69
IV-2. Knives 75
IV-3. Can Opener 81
IV-4. Dippers. 83
IV-5. Weighing and Measuring Equipment 87

Page

UNIT V. LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE

V-1. Cleaning and Disposal Equipment. 93
V-2. Cold Storage Equipment 97
V-3. Beverage Equipment 103
V-4. Food Cutting Equipment 111
V-5. Mixing Equipment 119
V-6. Holding and Service Equipment. 127

UNIT VI. LARGE EQUIPMENT FOR COOKING FOOD

VI-1. Toasters 135
VI-2. Surface Cooking Equipment. 139
VI-3. Ovens. 147

UNIT VII. TECHNIQUES OF FOOD PREPARATION

VII-1. Quality Food Preparation 151
VII-2. Terminology Used in Food Preparation 155
VII-3. Convenience Foods. 169
VII-4. Techniques of Portioning Food. 173
VII-5. Work Simplification and Work Schedules 177

UNIT VIII. FOOD PREPARATION

VIII-1. Beverages. 183
VIII-2. Sandwiches 189
VIII-3. Cereals. 191
VIII-4. Egg Cookery. 193

UNIT IX. FUNDAMENTALS OF FOOD SERVICE PROCEDURES

IX-1. Dining Room Service for Nursing Homes. 195
IX-2. Tray Line Assembly 199
IX-3. Food Distribution to Patients. 205

UNIT X. SAFETY

X-1. Safety Precautions 209
X-2. Fire Safety. 215

UNIT XI. SANITATION

XI-1. Food Contamination and Food-Borne Illnesses. . . 219
XI-2. Sanitation Codes 229
XI-3. Procedures for Dishwashing 233
XI-4. Cleaning vs. Sanitizing. 235
XI-5. Pest Prevention. 239
XI-6. Care of Furniture, Floors, and Surface Areas . . 243

Page

UNIT XII. BASIC SKILLS IN MANAGEMENT

XII-1. Dietary Office Procedures. 247
XII-2. Public Relations in Dietary Department 253
XII-3. Dietary Records. 259

ANSWER SHEETS FOR STUDY QUESTIONS

UNIT I. WHAT IS A DIETETIC AIDE?

I-1. The Dietetics Profession 267
I-2. Personal Characteristics 279

UNIT II. DIETETIC AIDE: A MEMBER OF THE DIETARY TEAM

II-1. Laws, Policies, and Regulations. 271
II-2. Interpersonal Relationships. 273
II-3. Self-evaluation. 275

UNIT III. DIET THERAPY

III-1. Dietary Problems of the Sick and Aging 277
III-2. The Basic Four Food Groups 279
III-3. Nutrients. 281
III-4. Nutrition for Persons of Various Ages. 283
III-5. Planning Nutritious Meals. 285
III-6. General and Therapeutic Diets. 287

UNIT IV. SMALL EQUIPMENT FOR FOOD PREPARATION AND SERVICE

IV-1. Hand Utensils. 289
IV-2. Knives 291
IV-3. Can Opener 293
IV-4. Dippers. 295
IV-5. Weighing and Measuring Equipment 297

UNIT V. LARGE EQUIPMENT AND FOOD PREPARATION AND SERVICE

V-1. Cleaning and Disposal Equipment. 299
V-2. Cold Storage Equipment 301
V-3. Beverage Equipment 303
V-4. Food Cutting Equipment 305
V-5. Mixing Equipment 307
V-6. Holding and Serving Equipment. 309

UNIT VI. LARGE EQUIPMENT FOR COOKING FOOD

VI-1. Toasters 311
VI-2. Surface Cooking Equipment. 313
VI-3. Ovens. 315

Page

UNIT VII. TECHNIQUES OF FOOD PREPARATION

VII-1. Quality Food Preparation 317
VII-2. Terminology Used in Food Preparation 319
VII-3. Convenience Foods. 323
VII-4. Techniques of Portioning Food. 325
VII-5. Work Simplification and Work Schedules 327

UNIT VIII. FOOD PREPARATION

VIII-1. Beverages. 329
VIII-2. Sandwiches 331
VIII-3. Cereals. 333
VIII-4. Egg Cookery. 335

UNIT IX. FUNDAMENTALS OF FOOD SERVICE PROCEDURES

XI-1. Dining Room Service in Nursing Homes 337
XI-2. Tray Line Assembly 339
XI-3. Food Distribution to Patients. 341

UNIT X. SAFETY

X-1. Safety Precautions 343
X-2. Fire Safety. 345

UNIT XI. SANITATION

XI-1. Food Contamination and Food-Borne Illness. . . 347
XI-2. Sanitation Codes 349
XI-3. Procedures for Dishwashing 351
XI-4. Cleaning vs. Sanitizing. 353
XI-5. Pest Prevention. 355
XI-6. Care of Furniture, Floors, and Surface Areas . 357

UNIT XII. BASIC SKILLS IN MANAGEMENT

XI-1. Dietary Office Procedures. 359
XI-2. Public Relations in Dietary Department 361
XI-3. Dietary Records. 363

UNIT TESTS

UNIT I. WHAT IS A DIETETIC AIDE?. 367

UNIT II. DIETETIC AIDE: A MEMBER OF THE DIETARY TEAM. 369

UNIT III. DIET THERAPY. 371

UNIT IV. SMALL EQUIPMENT FOR FOOD PREPARATION AND SERVICE. . . . 375

Page

UNIT V. LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE. . . . 377

UNIT VI. LARGE EQUIPMENT FOR COOKING FOOD. 381

UNIT VII. TECHNIQUES OF FOOD PREPARATION. 383

UNIT VIII. Food Preparation. 387

UNIT IX. FUNDAMENTALS OF FOOD SERVICE PROCEDURES 389

UNIT X. SAFETY. 391

UNIT XI. SANITATION. 393

UNIT XII. BASIC SKILLS IN MANAGEMENT. 397

ANSWER KEYS FOR UNIT TESTS

UNIT I. WHAT IS A DIETETIC AIDE? 401

UNIT II. DIETETIC AIDE: A MEMBER OF THE DIETARY TEAM. 401

UNIT III. DIET THERAPY. 401

UNIT IV. SMALL EQUIPMENT FOR FOOD PREPARATION AND SERVICE. . . . 402

UNIT V. LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE. . . . 402

UNIT VI. LARGE EQUIPMENT FOR COOKING FOOD. 402

UNIT VII. TECHNIQUES OF FOOD PREPARATION. 403

UNIT VIII. FOOD PREPARATION. 403

UNIT IX. FUNDAMENTALS OF FOOD SERVICE PROCEDURES 403

UNIT X. SAFETY. 403

UNIT XI. SANITATION. 404

UNIT XII. BASIC SKILLS IN MANAGEMENT. 404

REFERENCES REQUIRED FOR USE WITH INSTRUCTIONAL MATERIALS 407

OVERVIEW

DIETETIC AIDE

The occupation of dietetic aide is suggested for the student who has an interest in the food services related to patient care. To be successful, the student should be able to exercise judgment and initiative in assuming a variety of tasks in the dietary department; be courteous and tactful in dealing with patients, nursing staff, and other personnel; and practice safe, sanitary work habits, and personal hygiene. It is recommended that students selected for home economics cooperative education as a dietetic aide should have acquired some basic knowledge and developed some skills in food preparation and service through previous enrollment for a minimum of one year in comprehensive vocational homemaking or two semesters of food and nutrition oriented classes.

The dietetic aide works under the supervision of a qualified dietitian in a hospital or nursing home or may be under the direction of a tray line or food service supervisor who is regularly advised by a consultant dietitian. The dietetic aide prepares and delivers food trays to patients, performing any combination of the following duties: prepares trays by placing on them such items as silver, fruit juice, sugar, cream, milk, and butter; fills vacuum bottles or serving pots with hot beverage; apportions food servings according to diet lists; places serving of food in blender to prepare for soft or liquid diets; examines filled trays for completeness and places on cart or dumb-waiter; pushes cart to halls or ward kitchens at nursing station; serves tray to patients; collects empty trays and dishes and returns them on cart to kitchen; cleans work area, tables, and cabinets.

At the entry level, the dietetic aide performs the less complicated tasks involved in patient tray service. With additional experience and training (post-high school), the dietetic aide may assume managerial or supervisory responsibilities in the dietary department.

DIETETIC AIDE JOB ANALYSIS

(Used in interviews with dietitians, supervisors, and administrators of dietary services in hospitals, nursing homes, and other health care facilities.)

Name of Facility______________________________ Date______________________________

Person Interviewed____________________________ Interviewer____________________________

DIRECTIONS: Please check in appropriate column the responsibilities you expect a student to assume when working as a dietetic aide. In the proposed schedule column, indicate when during the school year you plan for the student to take up each task or group of tasks. This information will aid the teacher-coordinator in developing an individualized training plan for the student.

A dietetic aide assumes numerous responsibilities in patient care in such situations as hospitals, nursing homes, and other health care facilities. Working under the direction of a qualified dietitian, the student performs the following functions:

	DAILY	OCCASION-ALLY	DOES NOT APPLY	PROPOSED SCHEDULE
1. Relate personal qualifications to success as a dietetic aide.				
2. Observe policies of the establishment concerning work schedules, absences, and health regulations.				
3. Accept instruction and guidance from supervisory personnel in performing duties assigned as dietetic aide.				
4. Help to evaluate own progress in meeting job responsibilities.				
5. Display a sensitivity to the problems resulting from the infirmities of aging and illness that influence dietary service.				
6. Use nutrition information in planning, preparing, and serving meals for persons of various ages.				

	DAILY	OCCASION-ALLY	DOES NOT APPLY	PROPOSED SCHEDULE
7. Follow diet instructions when filling plates and trays for general and modified diets.				
8. Select proper hand utensil for specific food preparation tasks.				
9. Measure and weigh foods according to specifications listed in standard recipes.				
10. Select and correctly use proper piece of equipment for a specified job in food preparation and service.				
11. Select and correctly use proper piece of equipment for cooking food.				
12. Read recipes and know terminology, and follow directions.				
13. Assemble diet orders and place them on plates and trays.				
14. Verify diet orders by scanning filled plates to insure specified portion and quality of food.				
15. Plan work schedule so foods are ready at serving time.				
16. Prepare beverages.				
17. Follow standard procedures for preparing a variety of foods.				
18. Evaluate quality of food prepared.				
19. Perform dining room services.				
20. Assist in setting up tray assembly line for serving.				
21. Prepare such items, as silverware, napkins, and glassware for tray line.				
22. Examine filled trays for conformance with menu and diet regulations.				

	DAILY	OCCASION-ALLY	DOES NOT APPLY	PROPOSED SCHEDULE
23. Designate trays with name and room number for delivery to patients.				
24. Place food on a portable cart and on trays in such a way that foods remain at the correct temperature.				
25. Carry loaded trays or push serving cart between kitchen and serving areas.				
26. Deliver loaded food carts and trays to patient areas, nursing stations, or dining rooms.				
27. Pick up food carts and empty trays from patient areas, nursing stations, or dining rooms.				
28. Use precautions necessary to avoid accidents in food preparation.				
29. Apply appropriate emergency procedures.				
30. Handle food, beverages, equipment, utensils, and table settings in ways to prevent contamination.				
31. Follow federal, state, and local sanitation codes.				
32. Wash and inspect glassware, flatware, and tableware for cleanliness and spotlessness.				
33. Wash utensils and cooking equipment.				
34. Clean and sanitize furniture, floors, and other surfaces in the kitchen and in the serving area.				
35. Assist in the management of a dietary office.				
36. Make tabulations for the number of general and therapeutic diets to be prepared and assembled for meals.				

COURSE UNIT I

WHAT IS A DIETETIC AIDE?

OBJECTIVES: Describe the tasks and competencies of a dietetic aide.

Identify job opportunities in the field of dietetics.

Evaluate self in terms of contributions an aide can make toward maintaining high quality dietary service.

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
1. Relate personal qualifications to success as a dietetic aide.	Relate job responsibilities to own personal qualities and to type of dietary food service facility.	Job opportunities in the food service industry Types of food service facilities in nursing homes, hospitals, and other related health care institutions Tasks assumed by dietetic personnel Personal qualities and characteristics needed by a successful dietetic aide

COURSE UNIT II

DIETETIC AIDE: A MEMBER OF THE DIETARY TEAM

OBJECTIVES: Explain the contribution of dietary services to the overall operation of hospitals or nursing homes.

Discover the responsibilities of a dietetic aide in coordination with dietary and nursing staff.

Apply policies and rules of conduct to own particular job.

Describe attitudes toward interpersonal relationships (employer-employee, employee-employee) which are conducive to job success.

Evaluate own work habits and plan for self-improvement.

Apply the principles of motion economy to tasks performed on the job.

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
2. Observe policies of the establishment concerning work schedules, absences, and health regulations.	Adhere to established work standards and laws concerning dietary food services.	Federal laws affecting dietary personnel Policies and regulations governing dietary food service standards
	Interpret procedures in personnel manual in relation to own duties.	Types of dietary department schedules Use of split and/or staggered shifts in maintaining required department hours

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
3. Accept instruction and guidance from supervisory personnel in performing duties assigned as dietetic aide.	Accept and follow directions and instruction from persons in authority.	Attitudes which lead to good interpersonal relationships (employer-employee, employee-employee)
		Business policies related to the dietetic aide
	Function as a member of the health care team.	Organizational pattern of nursing home and hospital personnel
	Function in a variety of job responsibilities related to dietary services.	The importance of flexibility, courtesy, and tact when dealing with patients, nursing staff, and other personnel
	Assist other members of the staff.	Necessity of working cooperatively with other employees
4. Help to evaluate own progress in meeting job responsibilities.	Evaluate progress in meeting responsibilities.	Importance of self-evaluation
		Criteria for evaluating job performance
		Ways to use these criteria to evaluate personal progress in meeting job requirements

COURSE UNIT III

DIET THERAPY

OBJECTIVES: Identify characteristics and needs of the aged and/or sick patient that affect eating habits.

Relate nutritional information to various food service situations.

Summarize the food value of specified foods.

Plan nutritious menus for specific situations.

Make simple diet modifications.

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
5. Display a sensitivity to the problems resulting from the infirmities of aging and illness that influence dietary service.	Exercise judgement and initiative dealing with patients' dietary problems.	Human needs of sick and/or aging patients which require understanding and patience in providing adequate dietary services Welfare of patient being primary concern of dietary staff Relationship between psychological needs of patient and his reactions toward food
6. Use nutrition information in planning, preparing, and serving meals for persons of various ages.	Recognize factors which influence eating habits. Use the Basic Four Food Groups in guiding food selection.	Food habits and customs Food fads and fallacies Basic Four Food groups

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
	Answer questions about the nutritional value of foods served.	Nutrients needed by the body
	Recognize nutritional needs of persons of various ages.	Nutritional needs at various ages
	Assist in planning nutritious menus.	Factors to consider in menu planning
	Make and follow simple diet modifications.	Common diet modifications
7. Follow diet instructions when filling plates and trays for general and modified diets.	Read and follow instructions on a diet card when filling trays.	Diet terminology
		Kinds of diets and diet supplements: soft, liquid, controlled calorie, restricted calorie, bland, low sodium, diabetic, and fat restricted

COURSE UNIT IV

SMALL EQUIPMENT FOR FOOD PREPARATION AND SERVICE

OBJECTIVES: Identify the functions of equipment and utensils generally found in dietary food service.

Explain correct procedures for using dietary food service equipment.

Describe safety measures to observe when using and caring for equipment.

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
8. Select proper hand utensil for specific food preparation tasks.	Select and use appropriate equipment for food preparation tasks.	The selection of appropriate utensil for a particular task
9. Measure and weigh foods according to specifications listed in standard recipes.	Use standard weights and measures in preparing foods.	Procedures to follow when measuring and weighing foods Functions of scales and balances and their use and care

COURSE UNIT V

LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE

OBJECTIVES: Recognize the kinds and functions of equipment used in dietary kitchens.

Outline correct procedures for using commercial kitchen equipment.

Select the appropriate piece of equipment for a particular task.

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
10. Select and correctly use proper piece of equipment for a specified job in food preparation and service.	Use food service equipment correctly.	Procedures for using commercial kitchen equipment Factors related to the care of commercial kitchen equipment Appropriate methods of handling equipment to avoid injury and damage

COURSE UNIT VI

LARGE EQUIPMENT FOR COOKING FOOD

OBJECTIVES: Recognize the kinds and functions of equipment used in dietary kitchens.

Outline correct procedures for using commercial kitchen equipment.

Select the appropriate piece of equipment for a particular task.

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
11. Select and correctly use proper piece of equipment for cooking food.	Use food service equipment correctly.	Procedures for using commercial kitchen equipment Factors related to the care of commercial kitchen equipment Appropriate methods of handling equipment to avoid injury and damage

COURSE UNIT VII

TECHNIQUES OF FOOD PREPARATION

OBJECTIVES: Interpret terms, abbreviations, equivalents, and substitutions used in recipes.

Plan work so as to meet scheduled deadlines.

Adapt the techniques of work simplification to tasks performed on the job.

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
12. Read recipes and know terminology, and follow directions.	Follow standard recipes accurately.	Importance of following standard procedures when using a recipe
		Characteristics of a standard recipe
		Terminology, abbreviations, substitutions, and equivalents used in recipes
		Importance of following standard procedures when using a recipe
	Prepare convenience foods following directions.	Importance of following directions when preparing convenience foods
13. Assemble diet orders and place them on plates and trays.	Portion foods accurately and arrange attractively on plate.	Reasons for portioning foods
		Methods used to portion foods

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
14. Verify diet orders by scanning filled plates to insure specified portion and quality of food.	Check food orders quickly for accuracy and quality.	Necessity for accurate portions to insure satisfaction
15. Plan work schedule so foods are ready at serving time.	Schedule work so foods are prepared by serving time.	Purpose of work simplification Work simplification techniques Principles of motion economy which affect job performance

CO[illegible] VIII

FOOD PREPARATION

OBJECTIVES: Describe procedures to follow in the preparation and service of certain general and therapeutic diet foods.

Identify standards for quality food product.

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
16. Prepare beverages.	Prepare beverages of high quality consistently.	Standard procedures for preparing beverages
		Procedure for preparation of sustagen
17. Follow standard procedures for preparing a variety of foods.	Assembly ingredients and equipment for various processes of food preparation.	Ingredients used in various cold and hot foods
	Prepare cold and hot foods following standardized procedures.	Various processes of food preparation: Sandwiches Cereals Egg Cookery
		Correct temperature for preparing cold and hot foods
18. Evaluate quality of food prepared.	Judge quality of a variety of foods by sight, odor, and taste.	Quality standards for raw and prepared foods

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
		Necessity for consistency in preparation of high quality food products Ways to serve various cold and hot foods

COURSE UNIT IX

FOOD SERVICE PROCEDURES

OBJECTIVES: Explain the value of attractive and orderly dining room service or tray service for patients.

Apply the techniques of work simplification to tray line assembly.

Summarize the importance of efficiency and accuracy in the serving of food to patients and residents.

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
19. Perform dining room services.	Assist in procedures needed for dining room services.	Methods used in dining room service in nursing homes Advantages and disadvantages of various methods of food service used in nursing homes
20. Assist in setting up tray assembly line for serving.	Set up assembly line according to type of service used in health care facility.	Duties on tray line assembly Relationship of assembly line timing to service of quality foods
	Set up assembly line according to kinds of foods being served.	Relationship of methods of work simplification to efficient tray assembly
21. Prepare such items as silverware, napkins, and glassware for tray line.	Follow directions in preparing items for assembly of patients' trays.	Items to be included on each tray

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
	Follow instructions on diet card in filling trays.	Importance of carefully following instructions on diet cards
22. Examine filled trays for conformance with menu and diet regulations.	Examine trays for completeness according to a prescribed manner.	Importance of scanning trays to make sure that all trays contain the specified portions to meet the qualifications and standards of the menu
23. Designate trays with name and room number for delivery to patients.	Follow directions and designate tray to go to each patient's room.	Information to be included on tray cards
24. Place food on a portable cart and on trays in such a way that foods remain at the correct temperature.	Place food in cart efficiently in order to retain nutrients and quality.	Steps to follow in serving and maintaining foods at correct temperatures
25. Carry loaded trays or push serving cart between kitchen and serving areas.	Use work simplification techniques when performing this task.	Types of food distribution procedures (centralized versus decentralized) Functions of serving carts as an aid to efficient work methods
26. Deliver loaded food carts and trays to patient areas, nursing stations, or dining rooms.	Push cart to carry trays quietly using time and energy saving techniques.	Efficient methods of loading and carrying trays
27. Pick up food carts and empty trays from patient areas, nursing stations, or dining rooms.	Deliver trays and remove them from patients' rooms or nursing stations in a gracious, tactful manner.	Importance of tactful, quiet, and efficient methods in performing tasks

COURSE UNIT X

SAFETY

OBJECTIVES: Recognize the principles of safety which relate to the handling and sorting of food, equipment, and utensils.

Evaluate self in terms of safety practices followed on the job.

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
28. Use precautions necessary to avoid accidents in food preparation.	Recognize hazards that may cause accidents.	Conditions which may lead to accidents
		Necessity of being alert to hazardous situations
	Apply safety precautions to prevent accidents.	Precautions to follow in the food preparation area
		Appropriate methods to use for lifting and carrying objects
29. Apply appropriate emergency procedures.	Apply first aid to minor injuries.	First aid for minor injuries
	Use different types of fire extinguishers.	Types of fire extinguishers to use for different types of fires

COURSE UNIT XI

SANITATION

OBJECTIVES: Identify ways disease may be spread through careless handling of food and equipment.

Recognize the necessity of appropriate housekeeping and maintenance practices.

Summarize the need for special care of left-over food and dishes from insolation ward.

Evaluate personal practices in relation to principles of sanitation.

Discriminate between cleaning and sanitizing and know when to use each.

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
30. Handle food, beverages, equipment, utensils, and table settings in ways to prevent contamination.	Use judgment in handling food, equipment, and supplies in a sanitary manner.	Types of food-borne illnesses Ways disease and food-borne illnesses may be spread to patients and employees through careless handling of contaminated utensils, equipment, and food Procedures to follow to prevent food-borne illnesses Necessity for evaluation of personal habits related to cleanliness and sanitation
	Use sanitary practices.	Sanitary procedures for handling equipment and utensils Handling equipment and utensils

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
		Cleaning vs. sanitizing
		Pest control
		Difference between cleaning and sanitizing
		Importance of pest control in health care institutions
		Common pests and their control
31. Follow federal, state, and local sanitation codes.	Observe sanitation codes.	Federal and state sanitary requirements for dietary operations
32. Wash and inspect glassware, flatware, and tableware for cleanliness and spotlessness.	Wash dishes and utensils using efficient, sanitary techniques and appropriate materials and equipment.	Appropriate procedures for dishwashing
33. Wash utensils and cooking equipment.		Proper use and care of dishwashing equipment
34. Clean and sanitize furniture, floors, and other surfaces in the kitchen and in the serving area.	Perform housekeeping tasks assigned in an efficient and sanitary manner.	Importance of maintaining all surfaces in a sanitary manner
		Procedures for cleaning and sanitizing surfaces and equipment
	Select the correct materials for cleaning tables and chairs.	Procedures for cleaning tables and chairs
	Care for type of floor finish at place of employment.	Methods to use for cleaning a variety of types of floor finishes and coverings
		Procedure to follow for mopping floors

COURSE UNIT XII

BASIC SKILLS IN MANAGEMENT

OBJECTIVES: Show competency in establishing techniques for relationships with staff, patients, and visitors.

Demonstrate accuracy and efficiency in performing routine tasks.

TASKS	WORK EXPERIENCES	STUDY ASSIGNMENTS
35. Assist in the management of a dietary office.	Assist in keeping files and inventories.	Basic techniques of filing and inventory procedures
	Answer telephone and take diet orders and instructions.	Telephone etiquette
	Receive visitors and provide information.	Importance of good public relations in the dietary department
	Obtain dietary changes from the nursing department.	Procedure to follow when dietary changes are ordered by the doctor
36. Make tabulations for the number of general and therapeutic diets to be prepared and assembled for meals.	Keep records of meals served.	Necessity for an accurate count of meals served
	Organize diet orders into types of diets (such as general, soft, and diabetic) and tabulate the number of each type of diet.	Necessity for avoiding confusion and delays in serving trays to patients

INSTRUCTIONAL MATERIALS
FOR
STUDENTS

WHAT IS A COURSE OF STUDY?

INTRODUCTION TO STUDENTS

Bobby: What's this new course of study we're going to be using in our HECE (Home Economics Cooperative Education) class all about? The cover looks great, but I don't know about what's inside.

Kathy: I think it's going to be a big help to us both in class and on our jobs. We'll use it in class on the days when we're supposed to study about our particular jobs.

Bobby: That should help, I guess. What do we do, start at the beginning and go straight through it?

Kathy: Not necessarily. The course of study is divided into units and topics related to tasks we might perform on our jobs. Our training plans will tell us which lessons to study. We will be studying in class about the things we are learning on our jobs.

Bobby: You mean I don't have to go through all of it? That sounds great!

Kathy: Well, since jobs vary so much and the authors tried to include information for different kinds of jobs, there may be some units that won't apply to us right now. But I think it helps to know what else is going on where we work or what some of the other job opportunities are. The more we know, the more successful we'll be on our jobs and the better chance we'll have to get a job somewhere else if we move away from here.

Bobby: I suppose you're right about that. Besides, I noticed some units, like the one on diets, that would apply in one way or another to everyone employed as a dietetic aide. What if the course of study says to do something one way, and your supervisor wants it done another way?

Kathy: That probably won't happen, but if it should, always go by what your supervisor wants. After all, he hired you to do the job he needs done.

Bobby: Now I have another question. I saw references listed at the beginning of some of the topics. Do we have to read those? Isn't the same information in the course of study?

Kathy: No, the references include different information; so it's important that we read them as well as the course of study. I know it's a bother to get the references sometimes, but there would be no point in putting something in the course of study that was already available somewhere else. Besides, I've found some information that wasn't assigned in the references that was helpful to me.

Bobby: I saw questions, assignments, and suggestions for group work at the end of each topic. What's the difference? They all sound like work to me.

Kathy: The questions are to help us see if we understand what we've read, and the assignments give us a chance to apply what we've read to our jobs. The assignments help us see how the things we've learned relate to what we do. There's no right or wrong answer to an assignment; what we do is left up to us. The suggestions for group work give us a chance to work together on things we all need to learn. Working together gives us a chance to share problems and ideas. Besides, it's more fun than working by yourself all the time.

Bobby: I noticed some unfamiliar words that were underlined and followed by a definition. I hope the course of study explains all the new words.

Kathy: I'm sure it explains most new words, but it's impossible to know every word that might be new to each and every student. So, when I don't understand a word, I look it up in the dictionary.

Bobby: That's a good suggestion, I sometimes forget how helpful dictionaries can be!

Kathy: Any more questions?

Bobby: Not right now. I want to do well on my job and I think this course of study will help me. I'm ready to get started on Unit I.

INDIVIDUAL STUDY RECORD

Use the chart below to keep a record of your studies. Note the date you complete each part of a lesson and your grade or a check mark in the correct columns. When you have completed all the lessons in one unit, ask your teacher for the unit test.

Lesson	Study Questions		Assignments		Group Work		Unit Test	
	Date	Grade	Date	Grade	Date	Grade	Date	Grade

UNIT I-1

WHAT IS A DIETETIC AIDE?

SUBJECT: The Dietetics Profession

TASK: 1. Relate personal qualifications to success as a dietetic aide.

OBJECTIVES: When you finish this lesson, you should be able to
a. summarize the professional opportunities in the field of dietetics
b. describe tasks and competencies of a dietetic aide.

Dietetics is a profession in the health field which focuses on nutrition. While training as a dietetic aide, you may become interested in furthering your education in the field of dietetics. A person interested in the field should possess curiosity, imagination, and creativity, together with the following qualities:

- Interest in people
- Aptitude for science
- Management ability
- Good health
- Emotional stability
- Knowledge of food

After attending an accredited college and receiving a bachelor's degree in either foods and nutrition or institutional management, a person generally completes a program as a dietetic intern. An internship may range from six months to one year. The internship consists of learning while on the job in a hospital or in an approved health service institution. An internship is similar to an apprenticeship because a person learns by practical experience under skilled workers. Besides the apprenticeship type of internship, a few internship programs are combined with an undergraduate or a master's degree in a university setting.

The initials, "R.D.," following the dietitian's name indicate that the person is a Registered Dietitian. A dietitian becomes registered by successfully completing a national examination taken after he/she has obtained membership in the American Dietetic Association. A dietitian maintains registration by meeting continuing education requirements during a five-year period.

A clinical dietitian is a member of the health care team and provides nutritional care to patients. In this position, the dietitian plans both normal and therapeutic diets for patients as prescribed by doctors. Therapeutic diets are modifications of the normal diet for a special condition during a specific length of time. In addition, the clinical dietitian counsels patients on their food needs to help them fit their new diets into their lives at home once they leave the health care facility.

A dietitian can advance to assistant director or director of a dietary department in a hospital or other institution. However, positions as dietetic educators or research dietitians usually require further college work.

An educator dietitian coordinates dietetic education programs in hospitals affiliated with medical centers and universities. They may also be on college and university faculties teaching nutrition, food preparation, or institutional management. Others may work with business organizations developing materials for programs on nutrition education which can then be adapted either for use in mass media or for special interest groups.

A research dietitian is usually affiliated with a medical center. In this capacity, the dietitian plans and carries out nutrition studies. A research dietitian may also work with business organizations or food manufacturers. Here the dietitian conducts research to improve both the methods of processing and the quality, flavor, and nutritive values of food.

A dietitian may work as a nutritionist. This community-oriented person works to improve the health of the community by teaching persons of all age groups how to obtain the best nutrition possible for their income level. A nutritionist may be employed by prenatal and well-baby clinics, day care centers, children's institutions, neighborhood health centers, homes for the aged, schools, and organizations.

A food service supervisor possesses the knowledge and ability to supervise and instruct food service employees and to maintain high standards of food preparation, sanitation, and safety. A food supervisor should be a high school graduate, or equivalent, who has satisfactorily completed special courses in food service supervision and who has had supervised work experience in all phases of food service. In a large institution with a dietitian in charge of food service, there may be several food service supervisors, each assigned to a different part of the service under the direction of the dietary department.

A dietetic technician is a person who has successfully completed an approved associate degree program in dietetic technology from a 2-year college. The dietetic technician may help schedule employees' working hours, purchase foods, receive and store food, carry out the safety program, help with the maintenance of equipment, and maintain food quality and recipe standardization.

A dietetic assistant has participated in a 90-hour program during a one-year period. The duties of a dietetic assistant may include aiding in the overall operational system, helping maintain good customer relations, helping in menu planning, and helping with educational programs for employees. The dietetic assistant may also be responsible for employees in one specific area.

There is increasing demand for qualified employees in the field of dietetics. The road to becoming a registered dietitian is not an easy one, but it is extremely interesting and rewarding. How far you go in dietetics is up to you.

QUESTIONS:

1. Define the profession of dietetics.

2. List five qualities that are important for one interested in the dietetics profession.

   a.
   b.
   c.
   d.
   e.

For each job description listed, locate the dietetic personnel associated with it. Place the letter corresponding to your choice in the blank to the left of each job description. Use a letter only once.

JOB DESCRIPTION

_____3. Maintains registration by meeting continuing education requirements during a 5-year period.

_____4. Plans both normal and therapeutic diets for patients as prescribed by doctors.

_____5. Maintains good customer relations, assists with educational programs for employees, and helps plan meals.

_____6. Plans and carries out nutrition studies affiliated with a medical center.

_____7. Provides nutrition education to help improve the health of the community.

_____8. Coordinates dietetic education programs in hospitals affiliated with medical centers and universities.

_____9. Helps in scheduling employees' working hours, purchasing food, receiving and storing food, and maintaining quality and recipe standardization.

____10. Supervises and instructs food service employees, to maintain high standards of food preparation, sanitation, and safety.

DIETETIC PERSONNEL

a. Clinical Dietitian
b. Dietetic Assistant
c. Dietetic Technician
d. Educator Dietitian
e. Food Service Supervisor
f. Nutritionist
g. Registered Dietitian
h. Research Dietitian

ASSIGNMENTS:

I. List the proper titles to be used at your training station when referring to yourself, to your supervisor, and to other dietetic personnel.

II. Make a bulletin board describing dietary careers which HECE students can begin working toward while they are in high school. Place the bulletin board in a prominent place in school to encourage students to enroll in the program during spring recruitment.

GROUP WORK:

I. Work with other dietetic aides and survey your community to locate places in which dietetic personnel are employed. Use the yellow pages of the telephone directory and "help-wanted" ads in the newspaper to get started.

II. View a film or listen to a member of the dietetic profession speak on the job opportunities available in the profession of dietetics.

III. Working with other dietetic aides, make a group presentation describing to the entire class career opportunities in the dietetics field. Use visual aids to make your presentation interesting.

UNIT I-2

WHAT IS A DIETETIC AIDE?

SUBJECT:	Personal Characteristics
TASK:	1. Relate personal qualifications to success as a dietetic aide.
OBJECTIVES:	When you finish this lesson, you should be able to a. summarize qualities which contribute to success as a dietetic aide b. evaluate self in terms of qualities which contribute to success as a dietetic aide.

The answer to the question "What is a dietetic aide?" varies according to the place of employment. People receiving services of dietary departments may be either patients in hospitals or patients and residents in nursing homes. Therefore, dietetic aides may work under the daily supervision of either a dietitian in a large hospital or a part-time dietitian or a food service supervisor in a small hospital or nursing home. The dietetic aide may have such duties as wrapping glassware, silverware, and similar items for tray-line assembly procedures; following diet instructions when filling plates and trays for general and modified diets; preparing some food items; serving foods on tray-line assembly; delivering trays or food to patients; and assisting in the management of the dietary office.

There are many opportunities for employment in the health service profession for people who are interested in food service related to patient care. Caring for the sick and the aging is one of the most respected professions, and anyone contributing to the welfare of others should take pride in his work. Do you think you are the kind of person who would be successful as a dietetic aide? The purpose of the following questions is to help you take a look at yourself and decide what qualities you have that are important to success as a dietetic aide. Take time to think about these questions and be honest with yourself as you answer them.

WHAT ARE MY QUALIFICATIONS?

	MOST OF THE TIME	SOMETIMES	SELDOM
1. Do I enjoy working with people? A dietetic aide comes into contact with many different kinds of people, such as patients, nursing staff, and other food service personnel.			

	MOST OF THE TIME	SOMETIMES	SELDOM
2. Am I tactful and courteous in my relationships with others? People who are sick are often tense and worried and do not behave as they would under normal circumstances. The ability to handle these situations in a courteous and tactful manner is important.			
3. Am I genuinely interested in the welfare of others? A genuine concern and interest in the patient's dietary needs, in relation to problems resulting from aging and illness, lead to greater job satisfaction.			
4. Am I always clean, neat, and well-groomed? Well-groomed employees create a feeling of confidence in services provided.			
5. Am I dependable? Tardiness or absence creates hardships for the rest of the dietary team. The ability to follow instructions and carry out the tasks assigned is essential.			
6. Am I accurate and thorough in the things I do? Even a small mistake or oversight may be harmful to the patient or elderly person.			
7. Do I work well with others? Successful care of patients or the aged depends on the cooperation of all members of the staff.			

	MOST OF THE TIME	SOMETIMES	SELDOM
8. Am I willing to take instructions from others and accept criticism? Proper instructions and constructive criticism are essential elements for improving job performance.			
9. Am I adaptable and willing to perform a variety of tasks? Team work and keeping on schedule are necessary factors in a dietary food service operation. Helping others who are behind schedule may be part of your job from time to time.			
10. Do I work with speed? When the food is ready to be served, speed is of utmost importance in getting it served at correct temperatures.			
11. Am I in good health? A dietetic aide spends much time standing, walking, stooping, reaching, lifting and carrying equipment, pushing and pulling food carts. Good health is extremely important for successful performance on the job.			
12. Do I have an interest in dietary food service? The preparing and serving of high quality food, served in an attractive manner, is especially important in hospitals and nursing homes.			
13. Am I patient? Working with patients, nursing staff, and food service personnel involves many situations in which patience and understanding are necessary.			

QUESTIONS:

1. Make a list of at least six traits which would contribute to success as a dietetic aide.

   a.

   b.

   c.

   d.

   e.

   f.

ASSIGNMENTS:

I. Picture yourself in these two positions:
   1. A patient in a hospital.
   2. A supervisor at your training station.

   When you have these pictured in your mind, write a paragraph for each situation, describing the qualities you would most admire in a Dietetic Aide. Turn your paragraphs into your teacher when you have completed both of them.

II. Select one or two of the questions which you checked in the "SOMETIMES" or "SELDOM" column of the qualifications chart. Work out a plan for improving yourself in this area.

   For Example: Dependability

   1. I will be on time for work every day.
   2. I will listen to instructions more carefully to be sure to do what I am expected to do.

GROUP WORK:

I. Prepare a "question box" using questions relating to the qualifications required for a person to be successful as a dietetic aide. Draw out the questions for class discussion.

UNIT II-1

DIETETIC AIDE: A MEMBER OF THE DIETARY TEAM

SUBJECT: Laws, Policies, and Regulations

TASK: 2. Observe policies of the establishment concerning work schedules, absences, and health regulations.

OBJECTIVES: When you finish this lesson, you should be able to
a. list provisions of the laws, regulations, and policies which affect the dietetic aide
b. state reasons for dietary department schedules.

FEDERAL LAWS

If a hospital or nursing home participates in the Medicare program, the institution must meet certain requirements. A basic knowledge of these requirements is important to the dietetic aides so that they can fulfill their roles as members of the dietary team and assist the hospital or nursing home in maintaining the established standards. In general, the requirements which may affect dietetic aides are as follows:

1. There must be a qualified dietetian on the staff. A person designated by the administrator is responsible for the total food service. If this person is not a qualified dietitian, then regularly scheduled consultation from a qualified dietitian (or other person with suitable training) must be arranged. The dietitian must have a basic knowledge of the therapeutic diets prescribed by the attending physician.

2. There must be an adequate number of dietary employees, and their working hours must be scheduled to meet the dietary needs of the patients. Dietary services must be available for a period of 12 hours per day. Employees are trained to perform assigned duties and may rotate with other employees in assignments and shifts. Work assignments and duty schedules must be posted.

3. Personnel must be clean and neat. The dietary personnel must wear clean washable garments and hair nets or clean caps, and they must keep their hair and fingernails clean.

4. Personnel must have periodic health examinations to meet local, state, and federal codes. Food handlers' permits or health certificates must be current. Personnel with symptoms of communicable diseases or open, infectious wounds are not permitted to work in dietary services.

Institutions participating in the Medicare program must observe a number of additional regulations regarding the facilities, the housekeeping, and the dietary services. Copies of these requirements may be obtained from:

U.S. Department of Health, Education, and Welfare
Health Insurance for the Aged
Washington, D.C.

Every hospital and nursing home has standards which should be followed, but these standards may vary in different institutions. It is the responsibility of the administration to inform the employees of the rules, regulations, and policies of the particular institution. Although many of these rules, regulations, and policies cover the entire personnel of the hospital or nursing home, some of them apply specifically to the dietary department. In this case, the head dietitian informs the dietetic aide of the specific standards applying to that department. The dietetic aide is responsible for becoming familiar with these rules, regulations, and policies so that she may perform adequately as a member of the dietary team.

DIETARY DEPARTMENT SCHEDULES

The main objective of the dietary department, large or small, is to get the food to the patient as quickly as possible so that it is of acceptable quality and at the proper serving temperature. Dietary department schedules must be met so that the food is served to the patient on time. If all members of the dietary team, including the dietetic aide, complete their tasks quickly and efficiently, the team can then reach its objective of delivering quality food to the patient.

Dietary departments are responsible for providing three meals and additional nourishments each day. Generally, more patients are in the hospital for the noon meal; therefore, noon is a particularly busy time for hospitals. Although the number of meals served to residents and patients in nursing homes does not vary as much as in hospitals, the serving of the noon meal still requires more personnel.

The split or staggered shift helps the dietary department to supply more personnel at the time meals are being served. Shifts are also staggered or split to enable the hospital or nursing home to provide dietary services for the required number of hours of operation.

In the split shift, the bulk of time worked by each employee is scheduled for either the early morning or late afternoon hours with a block of unassigned time separating the two portions of the shift. (For example: 9:30 a.m. to 1:30 p.m., then 4:00 p.m. to 7:00 p.m.) The employee who works for an employer using staggered shifts, begins work at a designated time and continues to work the required number of hours. Other employees on the same department begin and end their work shifts at different times during the day to complete the range of hours required for dietary services. (For example: employees' shifts may begin at 6:00 a.m., 7:00 a.m., 11:00 a.m., or 3:00 p.m.)

Dietetic aides are assigned three-hour work shifts during the day, which allow them to attend classes and gain necessary on-the-job training. Their duties, as members of the dietary team, are scheduled to coincide with the shifts of the other personnel with whom they work.

QUESTIONS:

1. List four requirements hospitals and nursing homes must meet to be qualified for Medicare patients.

   a.

   b.

   c.

   d.

2. Why is it important that the dietetic aide understand the general requirements for institutions participating in the Medicare program?

3. Why is it important that dietary department schedules be met?

4. Why are split or staggered shifts sometimes necessary?

   a.

   b.

   c.

ASSIGNMENT:

I. Describe the schedule of the dietary department where you are employed. Compare this schedule with the schedule of other dietetic adies in the class. Discuss the reason for the similarities and differences in schedules.

GROUP WORK:

I. Working with other dietetic aides, make a group presentation describing to the entire class the provisions of the laws and policies which affect the dietetic aide. Use visual aids to make your presentation interesting.

UNIT II-2

DIETETIC AIDE: A MEMBER OF THE DIETARY TEAM

SUBJECT: Interpersonal Relationships

TASK: 3. Accept instruction and guidance from supervisory personnel in performing duties assigned as dietetic aide.

OBJECTIVES: When you finish this lesson, you should be able to

a. identify your position of dietetic aide in relation to other personnel
b. examine attitudes toward your employer, other employees, and the job
c. determine attitudes which would contribute to successful job performance.

When you begin work at your training station as a dietetic aide, you are on the first rung of the "World of Work" ladder. Whether you fall off, remain on the same rung, or move up to a higher rung depends largely upon your personal qualifications and interpersonal relationships with other personnel. The dietetic aide learns, sooner or later, that it is often easier to secure a job than to hold it and earn promotions.

If you want to be successful as a dietetic aide, examine your attitudes toward your employer, your fellow workers, and the job. The relationship between these attitudes and success on the job cannot be overemphasized.

Attitude Toward Employer

An important attitude to develop is loyalty to your employer. This means that you are concerned with the services provided in the hospital or nursing home where you are employed and that you want the patients and/or residents to receive the best care possible. Even though you may feel your role is insignificant, no one else is assigned your tasks, and it takes everyone working together to keep things running smoothly. Willingness to observe the rules and policies of the institution, is also part of being loyal to an employer.

The ability to follow directions and accept suggestions and criticisms will help improve your job performance. Your supervisor's comments are meant to help you to do a better job, not to hurt your feelings. Tasks are usually performed in a certain way for a reason. An attitude of open-mindedness is an asset on any job.

Attitude Toward Fellow Employees

Your ability to get along with others influences your success as a dietetic aide. A friendly, sincere manner, willingness to do your share of the work, and respect for the knowledge and skill of more experienced employees contributes to good relationships with fellow employees.

One of the most important factors in working as a member of the dietary team is to look for jobs to do when your tasks are completed. Helping other employees provides additional job experiences and helps them to know that you are cooperative. Flexibility is another important trait. Emergencies may occur which disrupt the usual work schedule, and you may be asked to do some extra task or to help someone with his job. The ability to change your activitiy or line of thought quickly is part of being flexible.

Attitude Toward the Job

Your job as dietetic aide deserves your undivided attention and your best efforts. You should bring to your job a genuine interest, positive attitudes, and a good physical condition. This helps you deliver high quality performance.

Charts I, II, and III on pages 21, 22, and 23 show the position of the dietetic aide in relation to other hospital or nursing home personnel. A study of these charts should give you an understanding of the organizational pattern of hospitals and nursing homes. Avenues of communication are also indicated in the charts.

EMPLOYMENT ETHICS

Absenteeism

In the event of illness, you should call the dietary office as soon as possible so that a replacement may be found. Notifying the dietary office of illness enables the staff to make the necessary adjustments in the work schedule. The team member who fails to notify the supervisor or who is absent without a good reason creates ill will and confusion in maintaining dietary services. An excessive number of unexcused absences is usually a reason for dismissal.

You should remain at home if you have a communicable disease or are too ill to perform your duties. Excessive absences due to illness, however, should cause you to examine your health habits. It is important that you have adequate rest, eat well-balanced meals, and take the necessary precautions to be able to resist infections.

During working hours, your supervisor should know where you are at all times in case of an emergency. Do not leave the premises without the permission of your supervisor.

Tardiness

It is important that you report to work on time. Your tardiness leaves your work undone, or other employees have to double-up to do it. If you find it impossible to report to work on time because of an emergency, notify your supervisor as early as possible. Repeated tardiness is usually a reason for dismissal.

Misuse of Work Time

Avoid the misuse of time when you are scheduled for work. Undue loafing, idleness, gossip, visiting with friends, horseplay, and disorderly conduct represents waste of time. This misuse of time interferes with employees who are trying to do their work.

CHART I

ORGANIZATION CHART FOR NURSING HOMES

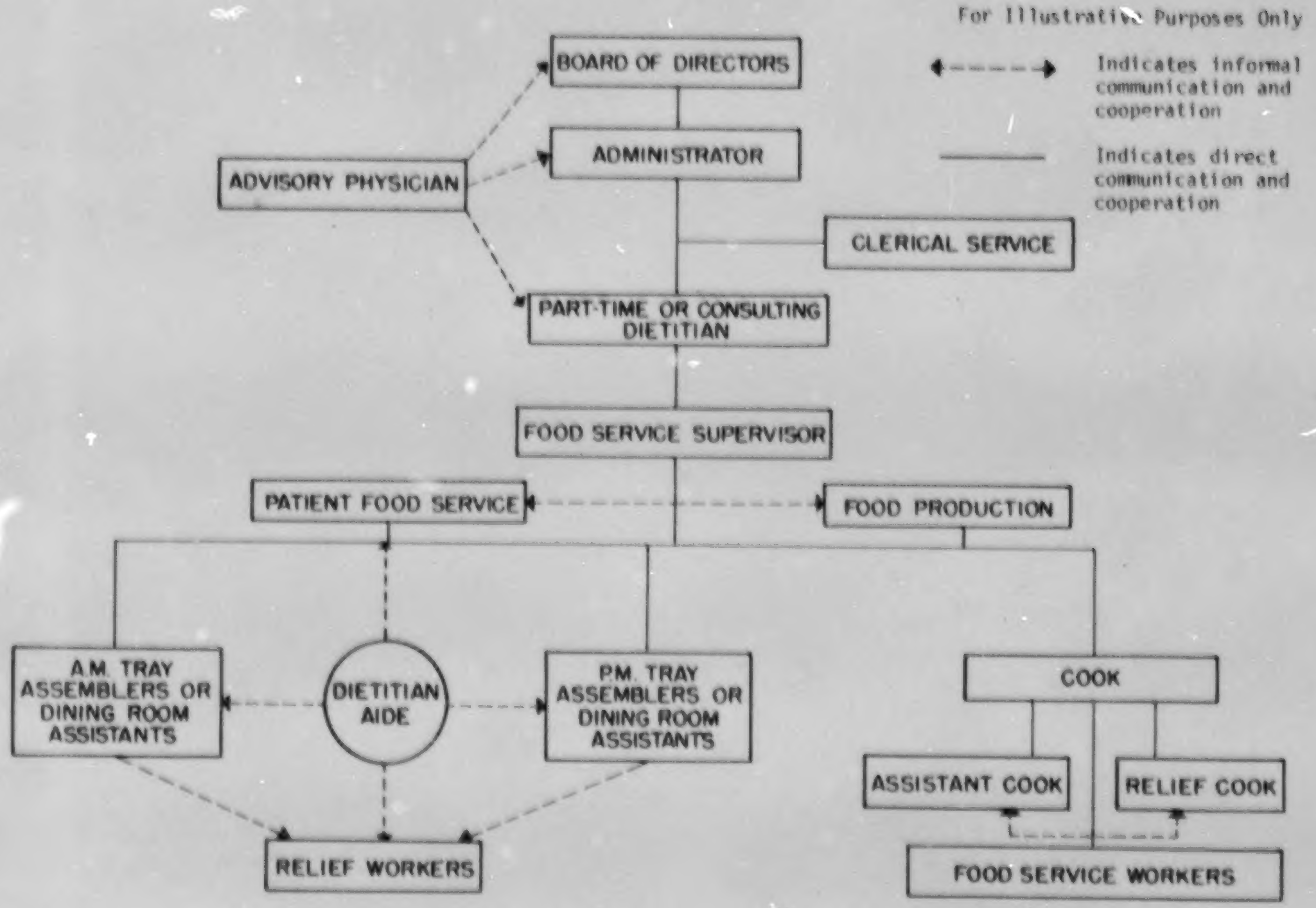
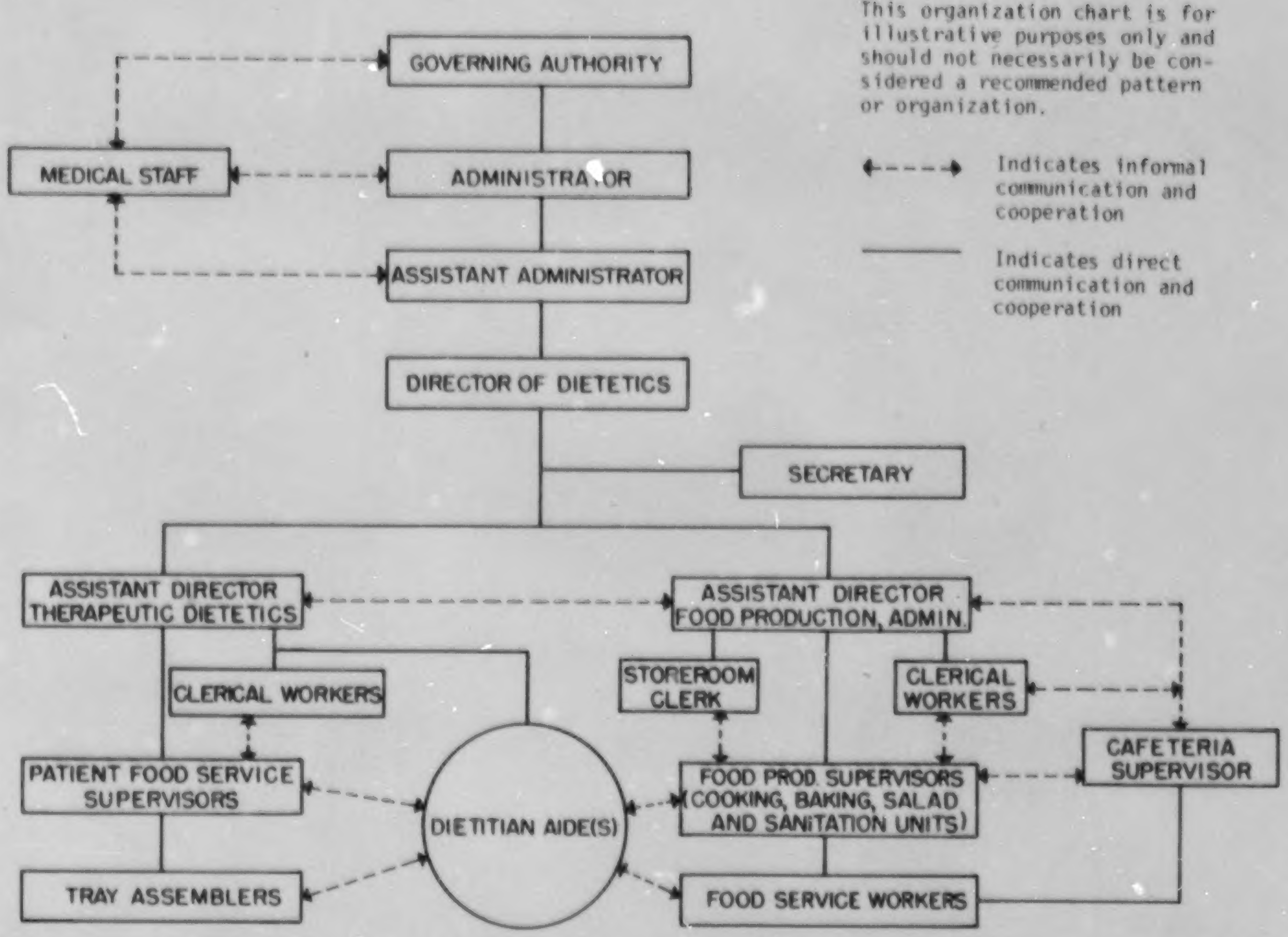

For Illustrative Purposes Only
Indicates informal communication and cooperation
Indicates direct communication and cooperation
BOARD OF DIRECTORS
ADMINISTRATOR
ADVISORY PHYSICIAN
CLERICAL SERVICE
PART-TIME OR CONSULTING DIETITIAN
FOOD SERVICE SUPERVISOR
PATIENT FOOD SERVICE
FOOD PRODUCTION
A.M. TRAY ASSEMBLERS OR DINING ROOM ASSISTANTS
DIETITIAN AIDE
P.M. TRAY ASSEMBLERS OR DINING ROOM ASSISTANTS
COOK
ASSISTANT COOK
RELIEF COOK
RELIEF WORKERS
FOOD SERVICE WORKERS

CHART II

ORGANIZATION CHART FOR LARGE HOSPITALS
(More than 100 Beds)

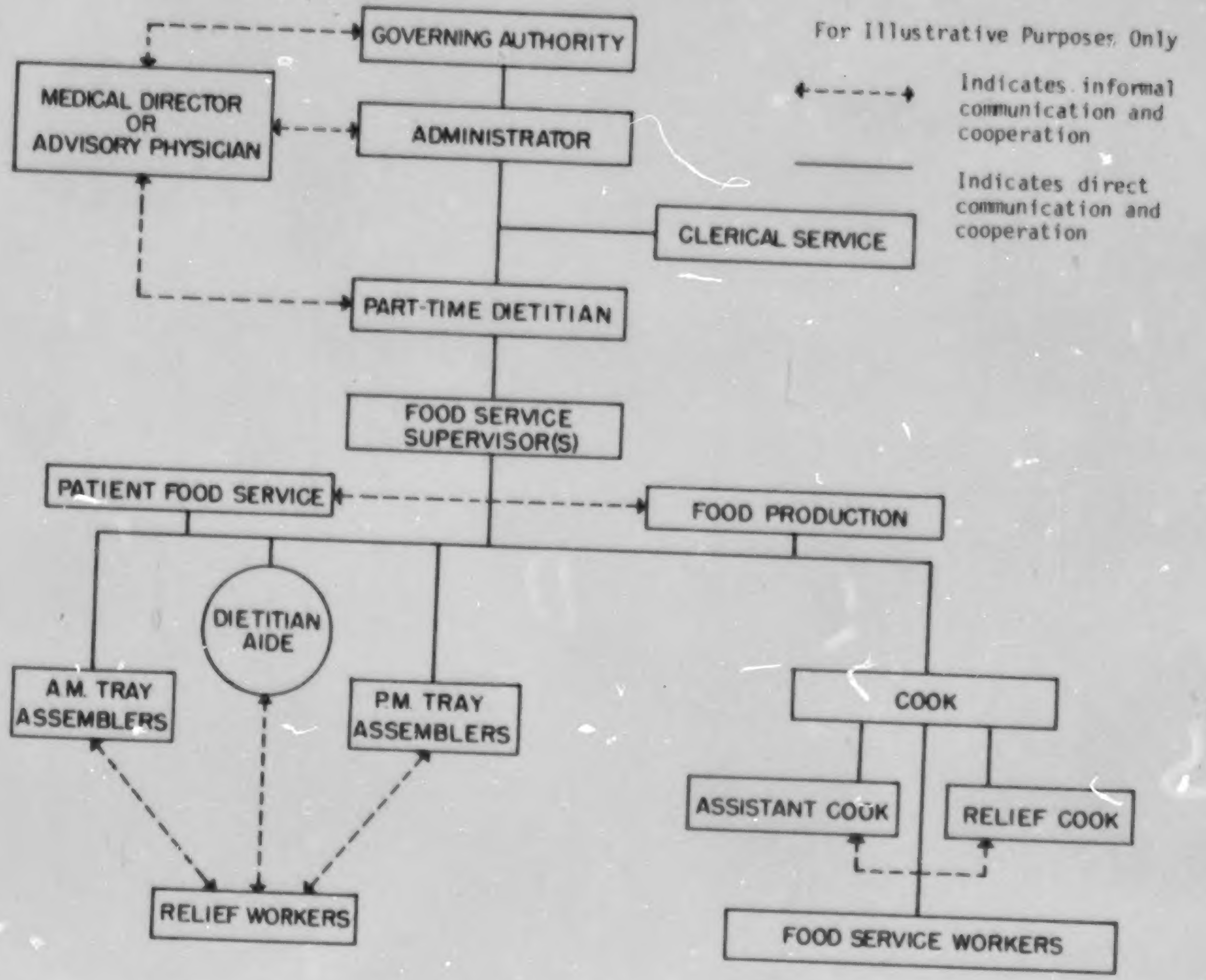


This organization chart is for illustrative purposes only and should not necessarily be considered a recommended pattern or organization.

←- - -→ Indicates informal communication and cooperation
—— Indicates direct communication and cooperation
GOVERNING AUTHORITY
MEDICAL STAFF
ADMINISTRATOR
ASSISTANT ADMINISTRATOR
DIRECTOR OF DIETETICS
SECRETARY
ASSISTANT DIRECTOR THERAPEUTIC DIETETICS
ASSISTANT DIRECTOR FOOD PRODUCTION, ADMIN.
CLERICAL WORKERS
STOREROOM CLERK
CLERICAL WORKERS
CAFETERIA SUPERVISOR
PATIENT FOOD SERVICE SUPERVISORS
DIETITIAN AIDE(S)
FOOD PROD. SUPERVISORS (COOKING, BAKING, SALAD AND SANITATION UNITS)
TRAY ASSEMBLERS
FOOD SERVICE WORKERS

CHART III

ORGANIZATION CHART FOR SMALL HOSPITALS
(Less than 100 Beds)


For Illustrative Purposes Only
Indicates informal communication and cooperation
Indicates direct communication and cooperation
GOVERNING AUTHORITY
MEDICAL DIRECTOR OR ADVISORY PHYSICIAN
ADMINISTRATOR
CLERICAL SERVICE
PART-TIME DIETITIAN
FOOD SERVICE SUPERVISOR(S)
PATIENT FOOD SERVICE
FOOD PRODUCTION
A.M. TRAY ASSEMBLERS
DIETITIAN AIDE
P.M. TRAY ASSEMBLERS
RELIEF WORKERS
COOK
ASSISTANT COOK
RELIEF COOK
FOOD SERVICE WORKERS

Use of Abusive Language

Watch your language. Cursing is out of line on any job. Use the best grammar you can and improve your grammar if you need to.

Dress Code

It is your responsibility to understand and to dress according to the dress code regulations of the dietary department where you are employed. Personal neatness and absolute cleanliness are especially important.

QUESTIONS:

1. List three attitudes which are necessary for success on the job.

   a.

   b.

   c.

2. Under what condition is the dietetic aide expected to be absent from work?

3. How can the dietetic aide avoid excessive illnesses?

   a.

   b.

   c.

4. If the dietetic aide is unable to be on the job, what should the aide do?

5. What may be the result if the dietetic aide does not call the supervisor when the aide is ill?

6. Explain what is meant by misuse of work time.

7. List three personnel groups that may involve informal communication and cooperation with the dietetic aide in a nursing home.

8. Name two personnel groups that may involve direct communication and cooperation with the dietetic aide in a large hospital.

ASSIGNMENTS:

I. Write a code of ethics which would apply specifically to your dietetic aide position. Compare this code with those produced by others in the class for their jobs. Discuss the reasons for the similarities and differences in the codes.

II. Draw an organization chart (similar to those on pages 21 through 23) for the hospital or nursing home where you are employed. With how many of the staff members do you come in contact? How does the way in which you do your job affect other staff members?

GROUP WORK:

I. In small groups, discuss ways employees can promote better communications with their employers. What are the responsibilities of the employer and of the employee? Share your ideas with other groups.

UNIT II-3

DIETETIC AIDE: A MEMBER OF THE DIETARY TEAM

SUBJECT: Self-evaluation

TASK: 4. Help to evaluate own progress in meeting job responsibilities.

OBJECTIVES: When you finish this lesson, you should be able to
- a. evaluate self in terms of qualities which contribute to success as a dietetic aide
- b. summarize plans for improvement of work habits and attitudes.

As an employee, the dietetic aide has the responsibility of developing good work habits in order to be successful. The employer has certain standards by which the job performance of his staff is judged. As a dietetic aide, you should also take an objective look at yourself in order to discover what you have to offer as an employee.

The checklist below will aid you in determining the kind of employee you are. It will be helpful to you only if you answer the questions honestly. The checklist may then be used as a basis for self-improvement. (Check either "yes" or "no.")

	YES	NO
1. Do you report to work on time?	____	____
2. Are you able to do your work without becoming bored or distracted?	____	____
3. Can you make adjustments to changes and unexpected situations?	____	____
4. Are you careful about your personal appearance?	____	____
5. Do you work in a neat and orderly manner?	____	____
6. Can you keep from becoming nervous and "falling apart" when working under pressure?	____	____
7. Can you work without constant supervision?	____	____
8. Are you willing to do whatever job is assigned to you?	____	____
9. Do you have a sense of responsibility?	____	____
10. Are you dependable? Can your employer tell you to do a job and know that it will be done satisfactorily?	____	____

	YES	NO
11. Have you gained the friendship and respect of those with whom you work?	___	___
12. Do you cooperate with other members of the dietary department as well as with the entire staff?	___	___
13. Do you respect the authority of those for whom you work?	___	___
14. Do you pay attention to instructions and carry them out accurately?	___	___
15. Do you accept criticism and use it in your program of self-improvement?	___	___
16. Are you willing to ask questions when you are not sure of what is expected of you?	___	___
17. Do you stick with a job until it is finished?	___	___
18. Do you remain pleasant as you work?	___	___
19. Are you friendly to all the people with whom you come in contact?	___	___
20. Do you have an attitude of loyalty toward the institution for which you work?	___	___

If most of your answers were "yes," your attitude toward work is healthy. On the other hand, if many answers were "no," you have a job to do. An honest look at yourself and a desire to improve will lead to success in the working world. In addition to the use of the above checklist as a means of self-evaluation, you might wish to utilize the following "Short Course in Human Relations" as suggested by Southwestern Bell Telephone Company.

The 6 most important words:
"I admit I made a mistake."
The 5 most important words:
"You did a good job."
The 4 most important words:
"What is your opinion?"
The 3 most important words:
"If you please."
The 2 most important words:
"Thank you."
The 1 most important word:
"We"
The least important word:
"I"

QUESTIONS:

1. What two attitudes lead to success in the working world?

   a.

   b.

2. As an employee, the dietetic aide has the responsibilty of ____________ ____.

ASSIGNMENT:

I. From the checklist, select the questions which you answered "no." Develop a plan, with suggestions from your teacher, for improving yourself in these areas. Make a progress report to show any improvement you have made in your work habits and attitudes.

GROUP WORK:

I. Prepare a "question box" for questions relating to good work habits that lead to success on the job. Draw out questions for class discussion.

UNIT III-1

DIET THERAPY

SUBJECT: Dietary Problems of the Sick and Aging

TASK: 5. Display a sensitivity to the problems resulting from the infirmities of aging and illness that influence dietary service.

OBJECTIVES: When you finish this lesson, you should be able to

a. identify characteristics and needs of aged or sick patients that affect eating habits
b. describe ways to encourage aged or sick patients to eat.

REFERENCE: Peyton, Alice B. Practical Nutrition. 2nd ed. Philadelphia, Pennsylvania: J.B. Lippincott Co., 1962. pp. 126-130.

The patient or resident is the most important person in any health care institution. A patient is a person who is hospitalized or who is confined to his room in a nursing home. A resident is a person in a nursing home who is ambulatory (able to walk) and can leave his room to eat in the dining room. To provide proper care for the patient or resident in a health care institution, the dietetic aide should understand the effect illness or aging has on dietary service.

Patients and residents in hospitals and nursing homes may react differently to food than they would in other circumstances. Food has many meanings. It does more than satisfy one's physical needs; it also helps to meet one's social needs. Food service in nursing homes' dining rooms provides opportunities for contact with other people and a chance to socialize. Food and understanding go together, especially for older people and those who are ill.

The resident or patient in a nursing home has many adjustments to make. It may take him some time to adjust to living in an institution. In addition to the change in environment, a resident or patient may have a chronic illness (one that lasts a long time). If he has a chronic illness, he may be discouraged and depressed. This attitude is often reflected in his feelings toward eating and may result in loss of appetite.

In other instances, the resident may be lonely and feel that he is out of touch with family and friends. He is now in a situation where he is dependent on others to do things that he was once able to do for himself. He may feel that no one really cares for him and that he no longer counts. These emotional reactions may affect the eating habits of the resident in one of two ways. He may either lose interest in food and not eat enough, or he may eat too much. If an elderly person lives alone, he may have little or no interest in cooking for one and eating by himself. In an institutional environment, there may be a difference in the eating behavior of persons who are able to eat in a dining room and those who must receive meals in their rooms. There are several advantages in providing dining room service for ambulatory residents:

(1) Eating with others helps improve the appetites of residents.
(2) Residents get exercise coming to dining area, which helps formerly bedfast patients to regain their health.
(3) The morale and sociability of residents is improved.
(4) Residents show an increased interest in their personal appearance.

Additional factors influence the aging adult's eating habits. His decrease in activity may result in decreased appetite. His nutritional needs, however, are basically the same except that fewer calories are required. Loss or impairment of teeth, makes it difficult to chew or, there may be problems in adjusting to false teeth. The senses of smell and taste are changed with aging, so food is less appetizing to the elderly person. Older people, therefore, do not enjoy the same odors and tastes of foods as they once did.

A person who has had a stroke and is partially paralyzed may have impaired muscle ability. With little or no feeling in one side of the face, there may be little control and no taste on this side of the mouth. A similar sensation results from a deadening of the mouth for dental work.

It is also essential to realize that food habits are determined by ethnic, religious, regional, and economic factors. We establish eating patterns as a child. We tend to imitate the eating habits of those around us. We also establish our attitudes toward food at this time. As we grow older, these patterns tend to become stronger. These eating patterns are a way of life for the elderly. If eating patterns are disrupted, it is very upsetting to the elderly person.

Ethnic background or the region of the country in which we live influences our food preferences and eating patterns. These factors should be considered when planning menus for the elderly.

Religious dietary customs affect the habits of many patients. Because of these customs, certain foods are not to be eaten at all, and others are to be limited on certain days and during fasts (days when one does not eat some or any foods).

Food preferences are greatly affected by the economic status of the patient. The type of food that he is accustomed to eating is often influenced by the amount of money that has been available. If little money was available for food during his early or adult life, the patient or resident may never have learned to enjoy a wide variety of foods, and his preferences may be limited. Elderly persons often have reduced incomes and may make poor selections in spending what little they have for food.

The patient or resident brings his own individual opinions and preferences about food with him. Occasionally, patients reject certain foods because they feel they are not desirable. For example, an older person might refuse milk because he feels it is only for babies. Serving the rejected foods in different forms makes it possible to include these foods in his diet. For example, if milk is rejected as a bevereage, it might be used in desserts or cream soups. Those who refuse salads might be given vegetables and fruits in other forms.

A new environment is hard for anyone to get used to. Often, patients in a hospital sleep poorly. Their normal time schedules have been upset. This can cause them to have short tempers which are easily set off.

Frequently, the elderly go to bed early in the evening and then awake long before breakfast. They may have been waiting for several hours for breakfast to be served. Even though their calorie intakes are reduced, it is of utmost importance for elderly persons to receive an adequate supply of the same nutrients needed by all age groups. It obviously takes more planning to reduce calorie intake and yet retain all the proper nutrients. This is usually done by reducing the amount of fats and sweets in the diet, since other foods contain more of the essential nutrients.

The patient's food plays an important role in his general well-being. Those responsible for meal planning might improve the patient's food acceptance by recognizing his food preferences and including these as often as possible in his diet. Another important reason for knowing the patient's likes and dislikes and for trying to please him is to help him know that someone cares about him. Interest shown by others may improve his appetite and his general well-being. The role of the dietary staff is therefore an extremely important one in contributing to the welfare of the patient or resident.

QUESTIONS:

1. Food means different things to different people. Name the two basic needs that food helps to meet for nursing home patients.

   a.

   b.

2. The nursing home resident has adjustments to make to his new life there. What might some of these adjustments include?

   a.

   b.

   c.

   d.

3. In what two ways might the resident's reactions to nursing home living affect his eating habits?

   a.

   b.

4. Why does the aging person who lives in a nursing home require fewer calories than when he was younger?

5. List four factors which influence a person's food habits.

   a.

   b.

   c.

   d.

6. Why is it important that the patient's food preferences be considered?

   a.

   b.

7. Define "ambulatory."

8. As Jane, a dietetic aide, is removing trays from the table, Mr. Jones, a new resident in the nursing home, tells Jane that he cannot eat the ice cream dessert because he had seafood for dinner. Jane should

   _____a. Tell Mr. Jones that there is nothing wrong with eating seafood and ice cream at the same meal.
   _____b. Agree with Mr. Jones because it is important not to hurt the feelings of the elderly.
   _____c. Tell the training sponsor the feelings expressed by Mr. Jones.

ASSIGNMENT:

I. Interview several elderly persons to discover their special food likes and dislikes. Compare your interviews with those of other class members.

GROUP WORK:

I. Listen to someone who operates a home for the elderly speak about dietary requirements, problems, and adjustments of the aged. How do these observations influence the dietary service?

UNIT III-2

DIET THERAPY

SUBJECT: The Basic Four Food Groups

TASK: 6. Use nutrition information in planning, preparing and serving meals for persons of various ages.

OBJECTIVES: When you finish this lesson, you should be able to
- a. name the Basic Four food groups
- b. identify foods in each food group
- c. describe the number of servings needed daily from each food group
- d. evaluate diets using the Basic Four food groups as a guide.

REFERENCES: Cornelius, Ethelwyn G. Food Service Careers. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1974. pp. 146-148 and 176.

Lewis, Dora S.; Peckham, Gladys C.; and Hovey, Helen S. Family Meals and Hospitality. New York, New York: Macmillan Publishing Co., 1972. pp. 5-7.

To help individuals choose foods wisely, nutrition experts have divided foods into four groups. If a person chooses daily from these four groups, called the Basic Four, his diet provides plenty of nutrients for energy, growth, and body repair.

The dietetic aide needs to understand the Basic Four. Knowledge of the Basic Four aids in meal planning, preparation, and service. The number of servings of various foods, as well as substitutes for foods within each group, serves as a guideline in planning meals. Nutritious snacks can also be based on the four food groups.

The four food groups should also serve as a guide for personal eating habits. To be successful on the job, one must maintain good personal health and a high level of energy. The best way to do this is to follow the Basic Four in personal eating habits. A person who eats a balanced diet feels good; therefore, he does a better job.

The Basic Four food group is illustrated in Family Meals and Hospitality, page 6. The foods included in each group of the Basic Four and recommended amounts to count as a serving are given below:*

MILK GROUP

Includes:

Milk--fluid whole, evaporated, skim, dry, buttermilk
Cheese--cheddar natural or processed; cottage, cream
Ice cream

---

*Adapted from United States Department of Health, Education, and Welfare. A Guide to Nutrition and Food Service for Nursing Homes and Homes for The Aged. Washington, D.C.: United States Government Printing Office, 1971. pp. 16-19.

Recommended Amounts:

2 or more 8-ounce cups daily for adults; 4 or more 8-ounce cups for teenagers; and 3 or more 8-ounce cups for children (6-ounce cups for some children under 8). Cheese and ice cream may replace part of the milk. The amount needed to replace a serving of milk is figured on the basis of calcium content. Usual portions of various kinds of cheese and of ice cream and their milk equivalents for calcium are:

1-inch cube cheddar cheese = 1/2 cup milk
1/2 cup cottage cheese = 1/3 cup milk
2 tablespoons cream cheese = 1 tablespoon milk
1/2 cup ice cream = 1/4 cup milk

MEAT GROUP

Includes:

Beef, veal, lamb, pork, and variety meats such as liver, heart, and kidney
Poultry and eggs
Fish and shellfish
As alternates, occasionally: dry beans, dry peas, lentils, nuts, peanuts, Peanut butter

Recommended Amounts:

2 or more servings every day.

Count As a Serving:

2 to 3 ounces of lean cooked meat, poultry, or fish (all without bone)
2 eggs
1 cup cooked dry beans, dry peas, or lentils
4 tablespoons peanut butter

VEGETABLE AND FRUIT GROUP

Includes:

All vegetables and fruits. Those valuable as sources of vitamins C and A are emphasized.

Recommended Amounts:

4 or more servings daily, including servings from the following three categories.

1. One serving of a good source of vitamin C or two servings of a fair source.

GOOD SOURCES OF VITAMIN C

Grapefruit
Grapefruit juice
Orange
Orange juice
Cantaloupe
Guava
Mango
Papaya
Raw strawberries
Broccoli
Brussels sprouts
Green pepper
Sweet red pepper

FAIR SOURCES OF VITAMIN C

Honeydew melon
Lemon
Tangerine
Tangerine juice
Watermelon

Asparagus tips
Raw cabbage
Collards
Garden cress
Kale

Kohlrabi
Mustard greens
Potatoes, white and sweet, cooked in the jacket

Spinach
Tomatoes
Tomato juice
Turnip greens

2. One serving, every other day, of a dark-green or deep-yellow vegetable or the fruits named below for vitamin A.

Apricots
Broccoli
Cantaloupe
Carrots

Chard
Collards
Cress
Kale

Mango
Persimmon
Pumpkin
Spinach

Sweet potato
Turnip greens and other dark-green leaves
Winter squash

3. Choose the remaining servings to make a total of at least 4 servings for the day, from this list of other vegetables and fruits; or choose additional servings from the above lists of fruits and vegetables.

Asparagus
Beans, snap, green
Beets
Beans, lima
Cabbage, cooked
Cauliflower
Celery
Corn, sweet

Eggplant
Lettuce, head
Onions
Parsnips
Peas, green
Potato, Irish
Rhubarb
Rutabagas

Cherries
Grapes
Sauerkraut
Squash, summer
Turnips
Apples
Bananas
Berries

Peaches
Pears
Pineapple, canned
Pineapple juice, canned
Plums
Prunes
Raisins

Count as a Serving:

1/2 cup of a cooked vegetable or fruit or juice, 1 cup of a raw vegetable such as a salad or apple, or a portion as usually served, such as 1 medium apple, banana, orange, or potato; 1/2 of a medium grapefruit or cantaloupe; or the juice of 1 lemon

BREAD AND CEREAL GROUP

Includes:

All breads and cereals that are whole grain, enriched (vitamins and minerals added in processing to improve nutritive value), or restored (nutrients lost during processing are replaced).

Breads
Cooked cereals
Ready-to-eat cereals
Cornmeal
Crackers

Flour
Grits
Macaroni
Spaghetti
Noodles
Parboiled rice and wheat

Rice
Rolled oats
Quick breads and baked goods if made with whole-grain or enriched flour

Recommended Amounts:

4 or more servings daily

Count as a Serving:

1 slice of bread
1 ounce or 3/4 cup dry, ready-to-eat cereal
1/2 to 3/4 cup cooked cereal, cornmeal, grits, macaroni, noodles, rice or spaghetti

QUESTIONS:

For each food listed locate the food group in which it is found. Place the letter corresponding to your choice in the blank to the left of each food. The letters are used more than once.

FOOD

_____ 1. Cottage cheese
_____ 2. Lentils
_____ 3. Liver
_____ 4. Broccoli
_____ 5. Rolled oats
_____ 6. Poultry
_____ 7. Ice cream
_____ 8. Noodles
_____ 9. Cabbage
_____ 10. Flour

FOOD GROUP

a. Bread and Cereal Group
b. Meat Group
c. Milk Group
d. Vegetable and Fruit Group

11. The number of servings recommended daily from the Milk Group are:

12. The number of servings recommended from the Bread and Cereal Group are:

13. The number of servings recommended from the Meat Group are:

14. The number of servings recommended from the Vegetable and Fruit Group are:

15. The job of choosing the best foods daily for good health is simplified by use of the ______________________________.

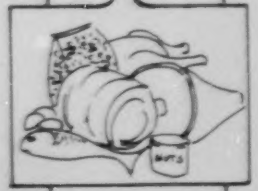
ASSIGNMENTS:

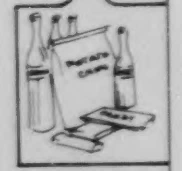
I.

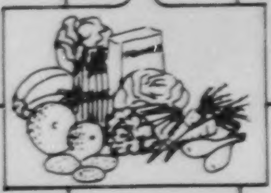
On your answer sheet, draw a chart similar to the example and record under the correct food group the number of servings you eat at each meal during the next three days. Do not change your regular diet habits (omit week-ends).

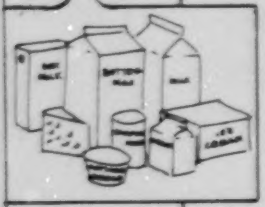
INDIVIDUAL DIET STUDY

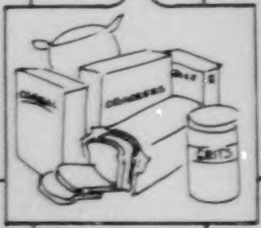
DAY	Milk and Milk Products	Meat, Fish, Eggs, Dried Beans, Peas	Fruits and Vegetables	Breads and Cereals	Empty Calories
First					
Breakfast:					
Lunch:					
Dinner:					
Snack:					
Total Servings:					
Second					
Total Servings:					
Third					
Total Servings:					











II.

FOLLOW-UP CHART

Review your diet study. Record the number of servings you ate each day under the appropriate group. Turn this in to your teacher.

Day	Milk and Milk Products	Meat, Fish, Eggs, Dried Beans, Peas	Fruits and Vegetables	Breads and Cereals	Empty Calories
First					
Second					
Third					

Use the Basic Four food groups to analyze your diet study. Answer the following questions.

1. a. In which food groups did you have the recommended number of servings?

   b. In which food groups were you lacking the recommended number of servings?

2. Make suggestions or develop a plan for improving your diet by:
   a. listing foods which need to be added to your diet.
   b. reducing excessive calories or empty calories.

III. Prepare a poster illustrating the Basic Four food groups. Include number of servings needed. Ask your training sponsor if you may display it at your place of employment. If not, display it in the classroom.

GROUP WORK:

I. In small groups plan a day's menu. for each of the following situations. Use the Basic Four food group as a guide in planning the menus.
   a) Children in a hospital ward
   b) The teenagers in your class
   c) Elderly patient in a nursing home

   Compare menus with other groups.

II. Participate with other dietetic aides in a role play situation called "Judge and Jury." List the foods you ate yesterday for breakfast, lunch, dinner, and snacks. Select the following characters for the role play: judge, jury, defense attorney, district attorney, defendant, and witnesses. The judge reads the charges against the defendant. (Example: The defendant is accused of eating ___________.) The defense attorney pleads the defendants' case, explaining why he planned as he did. The district attorney points out ways the defendant disobeyed the law of the Basic Four food groups. The jury must decide the case using the following criteria: required servings eaten in all four of the food groups = acquital; three of the groups = warning; two of the food groups = two-year sentence; one of the food groups = three-year sentence; none of the food groups = life sentence.

III. With other dietetic aides, play a game using cards with pictures or words representing various foods which may be eaten during a day. Each player is dealt nine cards. Of the remaining cards, turn the top card face up, and lay on the table to represent a discard pile; place the other cards remaining in the stack face down along side the discard pile. Each player in turn draws one card and discards one card face up; the player may choose to draw the top card in the stack or the top card in the discard pile. The object of the game is to collect cards representing foods to be included in two proposed menus, one for dinner and one for either breakfast or lunch, meeting the requirements of the four food groups. When a player has two complete menus, the player places his cards face up, and the group determines whether or not the menus are satisfactory. From cards held by all players the group then plans the menu for the remaining meal to complete the number of servings required daily in each of the four food groups.

UNIT III-3

DIET THERAPY

SUBJECT:	Nutrients
TASK:	6. Use nutrition information in planning, preparing and serving meals for persons of various ages.
OBJECTIVES:	When you finish this lesson, you should be able to a. identify nutrients b. describe the functions of nutrients in the body c. relate nutrients to specific food sources d. summarize the importance of water in the body e. explain that nutrients are essential for human health.
REFERENCE:	Lewis, Dora S.; Peckham, Gladys C.; and Hovey, Helen S. Family Meals and Hospitality. New York, New York: Macmillan Publishing Co., 1972. pp. 24-39. Peyton, Alice B. Practical Nutrition. 2nd ed. Philadelphia, Pennsylvania: J.B. Lippincott Co., 1962. pp. 21, 78-79.

WHAT ARE NUTRIENTS?

The body needs nutrients because they nourish the body. Nutrients are chemical substances found in food. Each nutrient has a specific use in the body. Nutrients build and repair body tissues, furnish heat and energy to the body, and regulate body processes. The nutrients needed by the body include proteins, carbohydrates, fats, vitamins, and minerals.

An indigestible fiber (roughage), known as cellulose, is needed in the diet for good health. Cellulose, a carbohydrate, provides bulk to the diet and aids in the elimination of body wastes. Major sources of cellulose include green leafy vegetables, stalks of vegetables, seeds and skins of fruits and vegetables and whole grain cereals.

The body must also have an adequate supply of water. Although it is not considered a basic nutrient, the average person needs six to eight glasses of water each day. Water makes up most of the blood in our bodies which carries nutrients to the cells of the body. Water aids digestion and absorption of food, regulates body temperature, lubricates moving parts of the body, and aids in the elimination of body wastes.

Cooking principles and techniques are especially important in preserving nutrients in foods. To cut down on the loss of nutrients in foods, you must follow the correct storage and refrigeration practices, control cooking time and temperature, use covered cooking utensils and a moderate amount of water.

QUESTIONS:

1. The science of relating food to growth and health is ________________.
2. Proteins, carbohydrates, fats, vitamins and minerals are called _______.
3. The primary purpose of protein is ________________________________.
4. Nutrients manufactured in plants containing large amounts of sugar and starch are ____.
5. Each protein is composed of hundreds of small molecules called ______________________________.
6. Nutrients from plant and animal sources providing the most concentrated source of energy are __________________________.
7. Vitamins A, D, E, and K are called _____________________________.
8. Bile salts, which are necessary for digestion, are aided in formation by __________________________.
9. Nutrients from animal products such as meat, poultry, cheese, milk, fish and eggs are referred to as _________________________.
10. Inorganic salts that aid in building the bony framework of the body are ______________________________.
11. Vitamins which dissolve in liquid solution are ____________________.
12. Minerals found in minute quantities in the body are referred to as ______________________________.
13. An effective way to provide iodine in the body and to prevent goiter is the use of __________________________.
14. Something not considered a basic nutrient but which is necessary for good health is __________________________.
15. Lack of sufficient food and essential nutrients in the diet results in __________________________.
16. Roughage, which provides bulk in the diet, is known as ______________.

For each function, locate the nutrient associated with it. Place the letter corresponding to your choice in the blank to the left of each function.

Function

_____17. Helps eyes adapt to darkness; unblemished skin
_____18. Prevents goiter; for proper functioning of thyroid gland
_____19. Builds strong, straight bones; clotting of blood; strong teeth and normal heartbeat
_____20. Helps blood to clot
_____21. Contains sugar and starch which is changed into a form usable as energy
_____22. Helps the body use calcium and phosphorus for strong bones and teeth
_____23. Furnishes building materials for growth and repair of body tissues
_____24. Builds red blood cells
_____25. Helps burn food in the body; prevents beriberi
_____26. Aids in clotting of blood
_____27. Helps to prevent bleeding gums

Nutrient

a. Calcium
b. Carbohydrates
c. Iodine
d. Iron
e. Phosphorous
f. Protein
g. Vitamin A
h. Vitamin B Complex
i. Vitamin C
j. Vitamin D
k. Vitamin E
l. Vitamin K

ASSIGNMENT:

I. Prepare a "word-a-gram using the nutrients and water. Below is an example using states: (Try to use all of the nutrients.)

```
                            N
U N I T E D         S T A T E S
      E                     W
      X
      A R K A N S A S       M
      S             O       E
                    U       X
                    T   A R I Z O N A
                    H       C
                        F L O R I D A
                    D
                    A
                    K
                    O
                    T
                    A
```

GROUP WORK:

I. Prepare a crossword puzzle using the basic nutrients. Prepare an answer sheet. Exchange puzzles and work puzzles of classmates. Check answers by answer sheets.

II. Play "Jeopardy" with other dietetic aides. Place small bell on desk. Divide into two teams. The leader will call out answers about the nutrients. The first, second, etc. person in line must run up, ring bell, and give answer in form of a question. Example: Leader says, "Helps blood to clot." Team member would answer, "What is Vitamin K?" Students may confer with team members before ringing bell, but must answer immediately after ringing. Leader should repeat questions for reinforcement.

UNIT III-4

DIET THERAPY

SUBJECT: Nutrition for Persons of Various Ages

TASK: 6. Use nutrition information in planning, preparing, and serving meals for persons of various ages.

OBJECTIVES: When you finish this lesson, you should be able to
a. describe the nutritional needs of persons of various ages
b. summarize factors that determine an individual's needs for food.

REFERENCE: Lewis, Dora S.; Peckham, Gladys C.; and Hovey, Helen S. Family Meals and Hospitality. New York, New York: Macmillan Publishing Co., 1972. pp. 12-21, pp. 112-118.

Activities, size, age, and stages of growth dictate an individual's needs for food. The quantity of food needed is measured in terms of energy (calories or joules). Building materials needed consist of proteins and minerals, especially calcium, phosphorus, magnesium, and iron. Vitamins are necessary to help our body use food for energy.

Energy needs of the body increase with body size and with activity. The functioning of internal organs and maintaining muscle tone represents the minimum amount of energy needed. Minimum energy needs are approximately 1,700 calories in a young man and 1,400 calories in a young woman. Activities may increase energy needed by several hundred calories.

Baby and Mother

Pregnancy causes hormone changes, increased basal metabolism (rate at which food is used by the body), increased fluid retention, increased absorption of certain nutrients, and changes in the digestive system. Weight gain should be gradual and controlled, averaging about 20 pounds for most women.

The National Research Council recommends an increase in the consumption of protein, calcium, phosphorus, and folic acid during pregnancy. More vitamin D is also needed because of its relation to mineral absorption and utilization. The present recommended amount of iron is 18 milligrams per day.

A diet suitable for a woman during pregnancy includes two servings of meat, poultry, or fish; one egg; two green vegetables; two other vegetables; four slices of bread; one cup of breakfast cereal; one or more fruits; three cups of milk; and other foods if they are needed for energy.

The main difference between a pregnant woman's diet and that of her family is that she needs more milk and iron-rich foods. A good basic diet can supply the nutrients needed during pregnancy. However, most doctors prescribe vitamin or mineral supplements during pregnancy.

The newborn infant needs higher levels of all nutrients in relation to his size than at any other age. This need is due to the infant's rapid growth and a higher metabolic rate. Energy requirements of infants vary according to their size and activities.

Commercially prepared formula or evaporated milk is generally used for feeding infants instead of fresh milk. A common formula using evaporated milk requires 3 ounces evaporated milk, 7 ounces water, and 1/2 ounce cane sugar. A supplement of 35 milligrams of vitamin C should be given daily. If vitamin D has not been added to the milk, 400 International Units should be given daily.

The Growing Child

When the child learns to chew, it is no longer necessary to strain or mash his food. He likes to help with his hands, striving towards independence. He may also have a smaller appetite. Parents often resort to pleading, bribing, scolding or threatening the young child to get him to eat.

When working with children, make mealtime pleasant and routine. Have patience, but maintain complete control, at all times. If a child misbehaves to the extent of distrupting the meal, he should be removed from the table and disciplined elsewhere.

If a child refuses to eat, offer food at mealtime without comments on the desirability of the food. After about 20 minutes, remove the plate and offer nothing else until the next meal. After the second or third day, even the most stubborn child will give in.

Amounts of nutrients needed by a preschool child are similar to those for a baby, although slightly higher. A suggested diet for a preschool child consists of 3 servings vitamin D milk; 2 ounces of lean meat, fish, or poultry; 1/2 cup orange juice or some source vitamin C; 1 egg; 2 slices enriched bread or other cereal; 1/2 cup cooked yellow or green leafy vegetable. These amounts should be supplemented with other fruits, vegetables, butter or margarine, cereals, and simple desserts. The rest of the diet should not consist of "empty calorie" foods such as soft drinks and candy.

Preadolescents

The elementary age child needs more food than the younger child. This is a good time to encourage a child to try new and different foods. Good eating habits should be stressed during this time. Along with three servings of milk, the amounts of meat, bread, fruit, and vegetables should be increased as his appetite dictates.

Adolescents

Adolescence, occuring between the ages of 10 and 20 years, is a period of rapid growth and maturation. The formation of muscles, bone, and blood require ample supplies of the building materials: protein, calcium, and iron. Because of an increase in activity and a rise in basal metabolism, adolescents consume more food.

A suggested diet for an adolescent boy consist of 4 cups of milk; two or more servings of foods from the meat group; four or more servings of fruits or vegetables including a good source of vitamin C and one serving of a green or yellow vegetable; and four or more servings of bread or enriched cereal products. Ice cream, peanut butter cookies, and other nutritious snacks may complete the diet. The suggested diet is similar for a teenage girl although she may consume only 3 cups of milk. A teenage girl needs more iron-rich foods than a teenage boy.

The overweight adolescent needs the same kinds of foods as others, but in smaller amounts. Instead of a "crash diet" the goal should be to develop eating habits which one can live with indefinitely.

Adults

As growth ends and maturity is reached, the need for building materials declines, as does basal metabolism. Compared with adolescents, an adult has a lower need for protein and calcium; therefore, 2 cups of milk is usually sufficient. An adult woman needs more iron-rich foods than an adult man.

The major nutritional problem at this stage is weight control. A person should maintain his normal weight at age 25 for the rest of his life. As one adds years, he needs to subtract calories. In choosing foods, a person needs to include meats, fruits, vegetables, milk, cereals, and bread. Things to avoid include pastries, rich cakes, gravies, nuts, candies, sugar, soft drinks, alcoholic beverages, and fried foods.

Elderly Persons

Nutrients supplied throughout the years affect the aging process and resistance to disease. As aging occurs basal metabolism and activities slow down, resulting in a decreased energy need. The average man and woman, ages 55-75, need 300 to 400 calories less per day than they did during the 35-55 year period. Older persons need smaller amounts of the B-complex vitamins. Because there is no evidence that cellular changes affect the need for nutrients, the needs for protein, calcium, vitamins A, C, and E remain the same.

Many elderly persons require special diets for various health conditions. The blender is useful in making foods easier to eat.

In working with elderly persons, helping them establish and maintain a nutritious diet is very important. Often, coaxing and encouragement are necessary to get them to eat.

Throughout the stages of life, a daily pattern to provide the nutrients should be as habitual as dressing, brushing teeth, and other routine activities!

QUESTIONS:

1. An individual's needs for food are determined by ____________, ____________, ____________, and ____________.

2. The amount of heat required to raise the temperature of 1 kilogram (2.2 pounds) of water 1° centigrade is a ____________.

3. The chemical changes that take place as food is used by the body to produce energy is referred to as ____________.

4. The quantity of food consumed is measured in terms of ____________.

5. The main difference between a pregnant woman's diet and the diet of her family is her increased need for ____________ and ____________.

6. Adolescents between the ages of 10 and 20 years consume more food than any other age group because of ____________ and ____________.

7. The major nutritional problem of adults is ____________.

8. Because the older person has cut down on physical activity his calorie allowance is ____________ than for a younger person.

ASSIGNMENTS:

I. Find pictures of "empty calorie" snacks. Find pictures of "nutritious" snacks. Use the pictures to make a poster or bulletin board.

II. Choose the group with which you are most concerned at your training station:

Group 1 - expectant mother
2 - infant
3 - growing child
4 - preadolescents
5 - adolescents
6 - adults
7 - oldsters

Find a picture illustration of this age group and prepare a poster which explains their basic nutritional needs.

GROUP WORK:

I. Combine all posters to make a bulletin board or display; or hang your poster in your training station if your employer gives you permission to display it.

78

UNIT III-5

DIET THERAPY

SUBJECT: Planning Nutritious Meals

TASK: 6. Use nutrition information in planning, preparing, and serving meals for persons of various ages.

OBJECTIVES: When you finish this lesson, you should be able to

a. summarize the factors that need to be considered in advance meal planning
b. explain the steps for meal planning
c. use the menu planning form when planning meals
d. explain the menu form for modified diets
e. describe the use of cycle menus

REFERENCE: Lewis, Dora S.; Peckham, Gladys C.; and Hovey, Helen S. Family Meals and Hospitality. New York, New York: Macmillan Publishing Co., 1972. pp. 106-112.

MEAL PLANNING

Meal planning is not one of the usual duties of the dietetic aide. However, the dietetic aide should have a basic knowledge of nutrition to be able to relate food needs to the welfare of the patients. Information on basic nutrition is also useful in dealing with questions and comments made by patients in regard to the food served them. Finally, this knowledge may serve as a basis for understanding therapeutic diets.

Good meal planning begins with a well-planned, written menu. Well-planned meals look attractive, taste good, provide the necessary nutritional requirements, satisfy the tastes and needs of the individual, and are within the budget of the institution.

Advanced planning is essential to insure that the foods needed for health are included in each day's meals. Menus can be varied even when a tight control must be kept on food costs. In addition, planning allows the most efficient scheduling of employees' time.

How far in advance menus are planned and written may vary, but one week is the minimum time recommended. Advanced planning for two, three, or four weeks is often convenient. If menus are planned in advance for longer periods of time, substitutions may be necessary if a selected food is not available.

The following steps for meal planning make the job easier.

1. Set aside a definite time to plan and write menus.
2. Have a quiet place to work. The job will be harder and take longer if there are frequent interruptions. Have a desk and a file for previous menus and records.
3. Have your pencil, eraser, paper, recipe books, and other tools at hand.
4. Review the menus for at least the previous week.
5. Consider the foods that are available according to season and that are in plentiful supply.
6. Know what foods are on hand in the storeroom and in the refrigerator.
7. Use a variety of methods of preparation during the week.
8. Include recommended servings from the Basic Four food groups in selecting food items for the menus.

Providing bedtime nourishment is important for patients in nursing homes and in some hospitals. Plan a bedtime nourishment for each day. Select the bedtime nourishment from such items as milk, fruit or juice, crackers, and especially food needed to complete nutritional intake for the day.

MENU PLANNING FORM

Another helpful device for meal planning is the menu planning form. The form lists each meal and the types of foods to be included in it. See the sample menu planning form on page 53. Follow this menu planning form to be sure the needed foods are included in the daily diet.

With the Basic Four food groups and the menu planning form as aids, you can take the first step toward meal planning. A few extra touches in menu planning take little time or money but add to the enjoyment of meals. For example, holidays offer opportunities to add interest to meals, since certain foods are especially appropriate for some holidays. Use table or tray decorations to celebrate special occasions. Some holidays to remember are Valentine's Day, Washington's Birthday, St. Patrick's Day, Easter, Independence Day, Halloween, Thanksgiving, and Christmas. Birthdays are important, too. Many college dormitories, children's nursery schools, and nursing homes provide a cake for each person's birthday. Use either a traditional birthday cake or a cup cake. Recognition of the individual's birthday is what counts.

DIET MODIFICATIONS

For various reasons throughout all stages of life, a person may need a modified diet. The modified diet is planned from the general diet, making only the substitutions that are necessary. Planning modified diets is not one of the duties of the dietetic aide. However, the dietetic aide should understand how a menu for a modified diet is planned from a regular menu. A trainee in any type of institution which provides specialized diets for its residents or patients should be aware of the extreme importance of strictly following prescribed diets. If a patient is given food which is not on his diet, serious health problems or a lawsuit could result.

MENU PLANNING FORM*

Day of Week Date

BREAKFAST

Fruit or juice
Cereal and/or eggs
Milk
Toast
Butter or margarine
Beverage

DINNER OR MAIN MEAL

Meat, fish, or poultry
Potato or substitute
Vegetable
Salad (optional)
Bread
Butter or margarine
Dessert
Milk
Beverage

LUNCH OR SUPPER

Soup, juice, fruit (optional)
Main dish--including proteins
Vegetable and/or salad
Bread
Butter or margarine
Dessert
Milk
Beverage

PLANNED BEDTIME NOURISHMENT

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*U.S. Department of Health, Education, and Welfare. A Guide for Nutrition and Food Services. Washington, D.C.: U.S. Government Printing Office, 1971. p. 21.

When working with patients in hospitals, persons in rest homes, or children, consider their emotions in presenting diets to them. Sudden changes without adequate emotional preparation may cause serious problems.

Some substitutions may be made within the restrictions of a patient's diet. When possible, present a choice of foods acceptable within the diet.

The menu on p. 55 illustrates various modified diets, planned from the general diet.

CYCLE MENUS

Planning cycle menus is not one of the normal duties of the dietetic aide. However, the dietetic aide should understand how a cycle menu operates and why it is used.

Cycle menus are a set of carefully planned menus. They cover a period of three to six weeks. When the period is completed, the cycle is repeated again. Because the availability of food varies with the seasons, a different set of cycle menus may be developed for winter, spring, summer, and fall.

Cycle menus save time in menu-planning. Once they are set up, they can be used over and over with minor changes to allow for any unexpected development. Cycle menus improve purchasing procedures, provide better use of employees' time, help to standardize food preparation procedures, and save money.

Cycle menus do not mean an end to menu-planning. Before using each menu of the cycle, the menu should be reviewed to determine whether any changes are needed. It [illegible] possible that a food selected for a certain day may not be available and a substitution will need to be made for it. A change in menus may be necessary when a holiday occurs.

As the menus are used, a record should be kept of their acceptance, the recipes, the amounts of food prepared and leftover, and other useful information. This information aids in perfecting the menus in each cycle.

The first step in developing cycle menus is to decide on the length of the cycle. It must not be so short that the menus are repeated too often. A cycle of three weeks is usually the shortest possible. Four, five, or six weeks may be better. The same steps are used in planning cycle menus as in any menu. Cycle menus for the most frequently prescribed modified diets may be developed to accompany regular menus.

MENU FORM FOR MODIFIED DIETS*

Form No.
Date

	REGULAR MENU	SOFT	LOW CALORIE	BLAND	LOW FAT
BREAKFAST	Orange juice	→	→	→	→
	Cream of Wheat	→		→	→
	Fried egg	Soft Cooked Egg	Soft Cooked Egg	Soft Cooked Egg	Soft Cooked Egg
	Toast	→	→ 1 slice	→	→
	Jelly	→		→	→
	Milk	→	→ skim	→	→ skim
	Coffee				
LUNCH	Baked Ham	Beef Pattie	→	Beef Pattie	Beef Pattie
	Glazed Sweet Potato	Mashed Potato		→	→
	Buttered Peas	→	→ plain peas	→ pureed	→
	Endive Salad		→ lemon		→ lemon
	French Dressing		wedge		wedge
	Bread	→	→ 1/2 slice	→	→
	Butter	→	→	→	→ 1 pat
	Pineapple Ice Cream	Vanilla Ice Cream	Cantaloupe	Vanilla Ice Cream	Cantaloupe
DINNER	Vegetable Soup	→	→		Consommé
	Welsh Rarebit on Rusk	→	Sliced Chicken	Sliced Chicken	Sliced Chicken
	Buttered Spinach	→	→	→ pureed	→
	Sliced Tomato Salad		→		→
	Rolls	Bread	Bread 1 slice	Bread	→
	Butter	→	→	→	
	Date Bars	Baked Custard	Peaches	Peaches	Peaches
	Milk	→	→ skim	→	→ skim

The regular menus for the day are listed in the left hand column. The arrows in other columns indicate the foods which can be taken from the regular menu for specific modified diets.

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*U.S. Department of Health, Education, and Welfare. A Guide to Nutrition and Food Service. Washington, D.C.: U.S. Government Printing Office, 1971. p. 40.

QUESTIONS:

1. Using the foods circled on the menu below, evaluate this menu by placing each food in the proper Basic Four food group on the chart on the next page.

MENU

BREAKFAST
CYCLE I MONDAY

[✓ Orange Juice]
Apple Juice

Oatmeal
[✓ Dry Cereal]

[✓ Scrambled Eggs]
Poached Eggs

[✓ Bacon]

Sweet Roll

BEVERAGE
Coffee Tea Iced Tea
Postum Hot Chocolate
Sanka [✓ Milk] Skim Milk
Chocolate Milk Buttermilk
Cream Lemon

BREAD
White [✓ Whole Wheat]

TOAST
White [✓ Whole Wheat] Melba
Butter Jelly

LUNCH
CYCLE I MONDAY

[✓ Fried Chicken Breast]
Bar-B-Que on Bun

[✓ Buttered Rice]

[✓ Buttered Squash]
Lima Beans

Fruit Salad
[✓ Tossed Salad]

[✓ Lemon Cake Pudding]

BEVERAGE
Coffee Tea [✓ Iced Tea]
Postum Hot Chocolate
Sanka Milk Skim Milk
Chocolate Milk Buttermilk
Cream Lemon

BREAD
White Whole Wheat [✓ Hot Bread]
Crackers Melba Toast Butter
Jelly

DINNER
CYCLE I MONDAY

Baked Ham
[✓ Italian Spaghetti]

Potatoes Au Gratin

[✓ Asparagus]

Sliced Tomatoes
[✓ Cottage Cheese]

[✓ Fresh Fruit Ambrosia]
Peach Cobbler

BEVERAGE
Coffee Tea Iced Tea
Postum Hot Chocolate
Sanka [✓ Milk] Skim Milk
Chocolate Milk Buttermilk
Cream Lemon

BREAD
White Whole Wheat
[✓ Hot Bread] Crackers
Melba Toast Butter
Jelly

MEAL	MILK AND MILK PRODUCTS	FISH, EGGS, MEATS	FRUITS AND VEGETABLES	BREADS AND CEREALS
BREAKFAST				
LUNCH				
DINNER				

2. Were adequate amounts of foods from each group included in the menu?

3. List four characteristics of a well-planned meal.
   a. ________________
   b. ________________
   c. ________________
   d. ________________

4. When planning meals for a nursing home, allow for ________________ ________________.

5. An aid to meal planning which lists each meal and the types of food to be included in it is called a ________________.

6. Modified diets are planned from the ________________.

7. A set of carefully planned menus that are used then repeated over a three to six weeks period is referred to as ________________.

Place an X in the blank by the letter of the phrase that best completes the sentence.

8. In the nursing home cafeteria, Mr. Jones chose a beef pattie, mashed potato, bread, butter and vanilla ice cream. Sally, the dietetic aide, knows that he is on a bland diet. Mr. Jones asked her to suggest a vegetable. Which vegetable should Sally suggest?
   ____a. Buttered spinach
   ____b. Pureed spinach
   ____c. Glazed sweet potato

9. Joe, a dietetic aide working in the children's ward of a hospital, is planning an afternoon snack for Judy, age 7, and Tommy, age 9, which item would help to meet their daily food requirements?
_____a. Ice cream soda
_____b. Potato chips
_____c. Candy bar

10. Mrs. Thomas has difficulty chewing and has asked Jim to suggest an apple dessert for her meal. Which dessert should Jim suggest?
_____a. Raw apple
_____b. Baked apple
_____c. Candied apple

11. While assisting her training sponsor in meal planning for the patients in the nursing home, Nancy planed a menu of baked white fish, scalloped potatoes and cauliflower. How can Nancy make the meal more appealing?
_____a. Replace cauliflower with creamed peas
_____b. Replace cauliflower with green beans
_____c. Add a vanilla custard dessert

ASSIGNMENTS:

I. Plan a menu that has sensory appeal. Include variety in textures, sizes, shapes, and colors.

II. Assume you have been assigned to prepare a menu for the following patients in a nursing home. Use the menu planning form, page 53, prepare a one-day diet for a
a) man who has had a bland diet prescribed.
b) lady with new dentures.
c) teenager who needs to loose weight.
d) man with heart problem who needs a low-fat diet.

GROUP WORK:

I. Discuss personal family meal practices and patterns.

II. Discuss ways to provide sensory appeal in meals. In addition to garnishes, what else could add interest to meals?

UNIT III-6

DIET THERAPY

SUBJECT: General and Therapeutic Diets

TASK: 7. Follow diet instructions when filling plates and trays for general and modified diets.

OBJECTIVES: When you finish this lesson, you should be able to

a. define dietary terminology
b. describe the most commonly used therapeutic diets
c. recognize menus for the most commonly used diets.

REFERENCE: Hospital Research and Educational Trust. *Being a Food Service Worker.* Washington, D.C.: Robert J. Brady Co., 1967. Ch. 6, pp. 10-16.

VOCABULARY TERMS FOR DIETETIC AIDE

Diet therapy is the procedure of changing normal diets to meet the body's requirements under special conditions. These special conditions deal primarily with the aging process and various illnesses. Before studying the diets for specific conditions, you should learn the special terms used in these specialized diets. You may have heard some of these words at your training station. You need to know them to properly perform your job.

Anemia	too little hemoglobin (red blood cells) in the blood.
Anorexia	loss of appetite for food.
Bulk	(preferred term is "indigestible parts of food.") The roughage or tough connective tissue of certain foods, such as celery or citrus fruits, which cannot be broken down by the gastrointestional tract.
Bland Diet	a diet composed of mild-flavored foods and foods that do not contain large amounts of cellulose or connective tissue.
Calorie or Kilocalorie	the energy value of food.
Cardio-vascular	the heart and vessels or ducts transporting blood.
Cholesterol	a fat-like substance found in animal tissues that is absorbed by the body in the presence of fat.
Convalescent	a person regaining health after an illness.

Diet Supplement	a concentrated source of nutrients prescribed in addition to the daily diet. May be a food such as yeast or wheat grain, a concentrate such as fish liver oil, or a doctor's prescription for vitamins or minerals.
Diet Therapy	modification of the normal diet to meet the requirements of the body under specific conditions.
Digestion	the process of breaking food down into substances which can be used by the body.
Exchange List	all common foods are divided into six groups; the foods in each list have approximately the same protein, fat, and carbohydrate content. Therefore, one food may be safely exchanged for another in the same list.
Food Allergy	a condition in which a person has an undesirable reaction to a food or food substance which is harmless to most people.
Gastrointestinal Tract	the part of the digestive system made up of the stomach and the intestines.
General or House Diet	the standard daily allowance of foods and beverages without any changes for the normal, healthy individual.
Gram	a basic unit of weight in the metric system equal to about 1/28 of an ounce or .0022 lb.
High-Calorie Diet	a diet higher in calories than the person's total energy requirement. (Usually prescribed for underweight persons.)
Kilogram	a basic metric unit of weight and mass equal to 1000 grams or to 2.2 lbs.
Low-Calorie Diet	a diet lower in calories than the person's total energy requirement. (Usually prescribed for overweight persons.)
Malnutrition	a condition of the body resulting from too much or not enough of one or more of the food nutrients.
Metabolism	all the chemical changes that result when the body uses food for tissue building, for producing energy, and in breaking down body tissues. Basal metabolism is the least amount of energy needed to keep the body alive when the person is not asleep. It does not include energy needed for activity.

Nutritionally Adequate	a diet supplying all the substances needed by the body in sufficient amounts. The method of insuring this is using the Basic Four food plan or Recommended Dietary Allowances.
Postoperative	after a surgical operation.
Restricted Diet	a diet which limits, curbs, or forbids the use of some foods or nutrients in the diet.
Sodium	a mineral commonly found in table salt or, as it is called in diet therapy, sodium chloride. Also found in certain foods and in drinking water.
Sodium Retention	a condition, called edema, in which too much sodium is held in the body tissues resulting in fluid imbalance.
Therapeutic Diet	a special type diet used as a necessary part of the treatment of a patient to improve his health.
Sustagen	a substance taken orally or by tube which is high in calories, protein, vitamins, and minerals.

TYPES OF DIETS

The planning of patients' diets is not one of the usual duties of a dietetic aide. It is the responsibility of the dietitian. However, the dietetic aide should have a thorough understanding of the various diets which are prepared in most hospitals and homes for the elderly.

A trainee in any type of institution which provides specialized diets for its residents or patients should be aware of the extreme importance of strictly following prescribed diets. If a patient is given food which is not on his or her diet, it could create very serious problems in the health of the individual, or even involve the trainee or institution in a serious lawsuit.

General Diets

The general or regular diet is based on a normal adequate diet and includes foods from the Basic Four food groups in the recommended amounts.

Most of the patients in a hospital are on the regular diet. A patient may be placed on a therapeutic diet for a short time due to special conditions, such as recent surgery. Many patients are then returned to the regular diet before leaving the hospital. A home for the aged also provides a regular diet for its residents; but if therapeutic diets are required by certain residents, such as diebetics, special diets are served to these residents on a regular basis. Most hospitals offer a selective menu for their patients. The patient may then choose the foods he prefers from those offered. Having a choice about the food he eats is very important to the patient. He is much more likely to eat the food that he has chosen. Any diet is successful only if the food is eaten. Some hospitals offer selective menus to patients on therapeutic diets, as well as those on the regular diet.

Therapeutic Diets

A therapeutic diet is a part of the treatment to improve a patient's health.

When a doctor feels that certain changes should be made in a patient's diet, he gives orders in exactly the same way that he would order medicines or any other treatment. The modification is then made by the dietitian. Although most hospitals have standard diets for specific conditions, it is important to understand that each patient is considered individually.

A diet can result in weight change; it can be designed to allow certain body organs to rest; it can be made up of foods which can be digested by an improperly functioning digestive tract; or it can be designed to overcome specific nutritional inadequacies.

At one time, changes in normal diets were thought of as withholding certain foods. However, in many instances a modified diet adds foods to a normal diet. Therefore, emphasis should be placed on allowed foods, rather than on a long list of foods to avoid.

A patient accepts a therapeutic diet more readily if he is given some explanation of its meaning. Some hospitals place an explanation card on the patient's tray. The card may say that his doctor has requested the diet modification and that the dietitian will call on him if he has any questions about the diet. Stress should be given that the diet is an important part of the patient's treatment.

Some of the more commonly used therapeutic diets are listed below.

1. Liquid. Prescribed for the acutely ill patient, or the patient who has difficulty in chewing or swallowing. Because liquids leave the gastrointestinal tract more quickly, they are less irritating than solid foods. When a patient is on a liquid diet, he should receive six or more feedings during the hours he is awake. The liquid diet may be one of two types:

   a. Clear-liquid, which includes liquids clear in color. The clear-liquid diet is used when a patient cannot take food or when there is nausea or vomiting. It supplies very few nutrients, but does give the body necessary fluids. A clear-liquid diet is usually given for only one or two days. Examples: gelatin, broths, tea, some carbonated beverages, apple juice.

   b. Full-liquid, which usually follows the clear-liquid diet as the patient improves. The properly planned full-liquid diet meets all the nutritional needs of a patient. Therefore, if necessary, a patient can stay on this diet for a longer length of time. Cream may be added to milk and milk drinks to increase their caloric value and to help reduce hunger pangs. Additional calories can be added by adding corn syrup or lactose, which is milk sugar. Examples: milk, eggnog, citrus and other juices, broth, coffee, tea, carbonated beverages, gelatin, sherbet (no pulp), cereal gruel, strained vegetable juices.

2. Soft. This diet generally follows the full-liquid diet and leads to the general or regular diet. The soft diet may be used for a patient with a serious infection, a patient recovering from surgery, or one who is too weak to make an effort to chew. The soft diet is nutritionally adequate and consists of soft textured foods which are easily digested. Examples: milk, soft eggs (not fried), tender or chopped meats (not fried or highly seasoned), potatoes and selected cooked vegetables, some cooked and canned fruits, toasted white bread, crackers, cooked cereals (no hot breads). Raw fruits and vegetables are not permitted, and tough meats should be avoided. Coffee and tea are usually limited.

3. Bland. The diet is sometimes given after full liquid diets or for patients with healing internal open lesions. The diet consists of foods with flavors not especially sweet, sour, sharp, bitter, or strong. Also, foods with coarse fibers should be avoided, as well as fried foods and strongly flavored vegetables, such as onions, dried beans, cabbage, and cauliflower. Coffee and tea should be limited or omitted because of the stimulating effects of caffein. Examples of bland foods: applesauce, ripe bananas, creamed soups, vanilla ice cream, sugar cookies, cooked pears, cottage cheese, plain gelatins, plain cake, plain custards and puddings, milk, macaroni, potatoes, soft eggs, rice, bread, and cereal products such as farina and cream of wheat.

4. Diabetic. In diabetes, the body is unable to use carbohydrates properly. Some mild cases of diabetes can be controlled by diet, and no medications are necessary.

   A diabetic diet should not be thought of as a "special diet," but rather as a modification of a normal diet. With the exception of carbohydrates, the diabetic person requires the same nutrients as a normal person.

   It is the responsibility of the patient's doctor to prescribe the exact amounts of protein, fat, and carbohydrate in each diabetic's diet. In a hospital or nursing home, it is up to the dietitian to see that these orders are carefully followed. Diets used to control diabetes are planned to be nutritionally adequate for the patient. Considerations in the diabetic diet include (1) using the exchange list to restrict amounts and types of certain foods and (2) measuring food with standard equipment to control amounts of certain foods. Use of the exchange list makes it easier to provide a diet as near a normal diet as possible.

   The exchange list divides foods into six food groups. Foods in each group have comparable food values, making it possible for one food to be substituted for another food in the same group. The purpose of the exchange list is to provide variety and satisfying foods in the diet. This list is also used in weight reduction diets and for diets of some cardiovascular patients. An example of an exchange for 1 slice of bread is 1/2 cup cooked cereal or 1/2 cup mashed potato.

5. Calorie-restricted: These diets are usually for weight reduction. Although the calorie content is limited, the diets are nutritionally adequate. The exchange list system is often used when planning diets for weight reduction. Fad diets often recommend only a few food items and may provide weight loss, but are nutritionally inadequate. Any reducing should be done under the direction of a doctor. Skipping meals is no aid in calorie-restricted diets because it only makes the individual more eager to eat the next meal, and he therefore eats more.

6. Controlled-calorie: These diets are used to maintain weight without gaining or losing. When the desired amount of weight has been lost, calorie intake must be adjusted to maintain the loss. This makes it necessary for the individual to relearn eating habits in order to keep the weight off. The exchange list is used in the controlled-calorie diet.

7. Fat-restricted: These diets are used for patients with liver, gall bladder, and certain cardio-vascular diseases. Although nutritonally adequate, this diet may be low in calories due to fat restriction and may be supplemented by additional amounts of protein and carbohydrate when advisable. The patient should be made to understand the importance of diet and that failure to follow the diet may cause his illness to return, or that it may take him longer to fully recover.

   Patients on a low-fat diet may have little, if any, appetite, so the hospital staff should encourage him to eat the prescribed diet.

8. Sodium (salt) -restricted: Generally, these diets are used when there is edema related to heart conditions, toxemia of pregnancy, and other swelling conditions caused by sodium remaining in the body tissues. The diet is planned to be nutritionally adequate for the patient, with limited amounts of salt and foods high in sodium content. Examples of high sodium content foods which should be avoided include: bacon, ham, corned beef, olives, sauerkraut, sausage, potato chips, salty crackers, pretzels, salt water fish, and shellfish.

   A patient on a low-sodium diet may have little appetite for meals, especially when the diet is severely restricted in salt. Therefore, this patient's food should be made as attractive and tasty as possible. This can be done by planning meals which provide a variety of colors, textures, and flavors. Sometimes raw vegetables and fruits are accepted better than the cooked forms. One trick to increase the apparent saltiness of foods is to sprinkle it with a small amount of lemon juice. (Salt and sour tastes are closely related.)

   Before leaving the hospital, the patient should thoroughly understand his diet. He should be taught how to read food labels to look for sodium in the ingredients.

Additional types of therapeutic diets are described in the reference assignment.

QUESTIONS:

Match the terms with the definition. The terms may be used more than once or not at all.

DEFINITIONS

_____1. A concentrated source of nutrients added to the diet.

_____2. All of the chemical changes resulting from the body's use of food for tissue building, energy production, and breakdown of body tissues.

_____3. A diet which curbs or restricts amounts of something in the diet.

_____4. The energy value of food.

_____5. A mineral commonly found in table salt, certain foods, and in drinking water.

_____6. A means by which foods are divided into six groups, with foods in each group having approximately the same protein, fat, and carbohydrate content.

_____7. A special diet used as a part of the patient's treatment to improve his health.

_____8. The standard daily allowance of food and beverages for the normal, healthy, individual.

_____9. A means dietitians use for modifying the normal diet to meet the requirements of the body under certain conditions.

____10. A diet which meets all of the Basic Four food group requirements for supplying all the substances needed by the body in sufficient amounts.

TERMS

a. Calorie
b. Diet supplement
c. Diet therapy
d. Exchange list
e. General diet
f. Metabolism
g. Nutritionally adequate
h. Restricted diet
i. Sodium
j. Sodium retention
k. Therapeutic diet

Using the following words, complete the situations in items 11-15 below:

cardio-vascular
postoperative
convalescent

calorie-restricted
edema or sodium retention
anorexia or loss of appetite

11. Mr. Jones had a gastrectomy this morning. As a ____________________ patient, he will be fed a liquid diet for a short time.

12. Mr. Brown suffered a heart attack and was hospitalized immediately. His condition involves the ____________________ areas of the body.

13. Mary is recovering from pneumonia; therefore, she is a ____________________ patient.

14. Mrs. Gordon is expecting her first baby within the next few days. She was admitted to the hospital last night with serious swelling in her ankles and feet caused by ____________________, or water retention in the tissues.

15. Mr. Byrd is hospitalized for a heart condition. The dietitian marked his dietary chart "excessively overweight"; his name was added to the list of patients on a ____ ____________________ diet.

16. What is meant by the term "selective menu"?

17. The basic reason for using a selective menu for patients on a regular hospital diet is ____ ___.

18. What is the difference between a clear-liquid and a full-liquid diet?

19. What is the difference between a general and a soft diet?

20. What are some of the limitations of the diabetic diet?

21. What is the purpose of the exchange list?

22. What other therapeutic diets use the exchange list?

23. What is the difference bewteen restricted-calorie diets and controlled-calorie diets?

24. Observe the following menu and decide which foods would be altered or changed on a fat-restricted diet:

Fried Chicken Breasts
Potatoes Au Gratin
Asparagus Sliced Tomatoes
Peach Cobbler

25. What is limited in the sodium-restricted diet?

26. Below are some of the conditions listed on the main diet chart in the dietary office. List a type of diet which might be served to each patient.

______________________ a. Mr. Brown Internal open lesions
______________________ b. Mrs. Luce No dietary modification
______________________ c. Mrs. Landa Extremely overweight
______________________ d. Mrs. Jennings Nutritionally adequate diet (patient has no teeth)

27. From the following list of foods, pick out the ones which would not be served to patients on
a. a bland diet.

b. a sodium-restricted diet.

c. a diabetic diet.

cooked pears
cottage cheese
soft-cooked eggs
shrimp
white pepper
cream of wheat
ketchup

cauliflower
plain cake
cream of chicken soup
ham
potatoes
candy
sweet potatoes

28. Harry Brown, an ulcer patient, was sent a tray with the following food items: Waldorf salad, club steak, mashed potatoes, and ice cream. The tray card indicated he should have a soft diet. Which items are not appropriate for a soft diet?

ASSIGNMENTS:

I. Describe the system used at your taining station to identify trays of food for different therapeutic diets. Form groups to compare the systems used at the various training stations represented.

II. Explain the procedure used at your training station to change a patient's diet from a presurgical diet to a postsurgical diet.

GROUP WORK:

I. Listen to a dietition discuss the various prescribed diets which are prepared in most hospitals and nursing homes. Why is it important for the dietetic aide to be aware of the importance of strictly following the prescribed diets?

UNIT IV-1

SMALL EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Hand Utensils

TASK: 8. Select proper hand utensil for specific food preparation tasks.

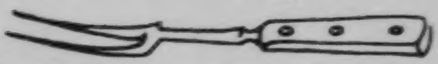
OBJECTIVES: When you finish this lesson, you should be able to
a. explain how to use hand utensils when preparing food
b. identify correct hand utensils for a specific task.

Can you identify all the hand utensils in the dietetic kitchen where you are employed? Do you know which utensil will do the best job for the tasks you are assigned? Using the correct utensil for each task can save time and motion, prevent accidents, and give better results. Below are a few tips for saving time when using utensils.

1. Use as few utensils as necessary to do the job well.
2. Select the best tool for each job.
3. Assemble all needed utensils before beginning the task.

The dietetic kitchen where you are employed may or may not be equipped with many specialized utensils, but you should be able to name some of the most common hand utensils and uderstand how to use and care for them. The following list of various hand utensils and their uses should help you achieve confidence and skill in working with such equipment.

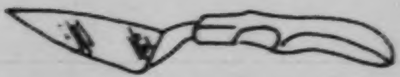
COOK'S, UTILITY, OR KITCHEN FORK



Turning and handling roasts; holding meats while slicing

8 to 14 inches in length; steel tines riveted to wooden handle

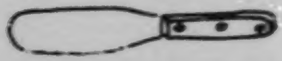
PIE KNIFE OR SERVER



Removing pieces of pie from pan

6-inch length--flat area 4 inches by 2 inches

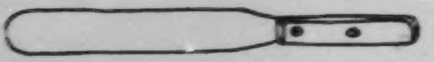
SANDWICH SPREADER



Spreading fillings on sandwiches

3 1/2-inch blade, which may be serrated

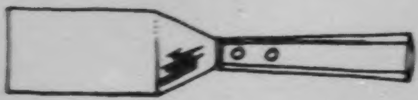
SPATULA



8 to 12 inches in length; has medium flexibility

Leveling ingredients in measuring spoons or cups; spreading large areas of foods

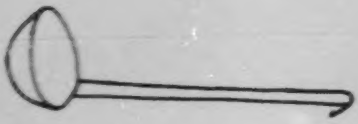
HAMBURGER TURNER



6-inch blade of stainless steel

Turning hamburgers or other meat patties

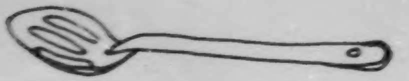
LADLES



Variety of sizes from 1 to 30 oz.

Portioning liquids such as gravies, salad dressings, soups, and sauces

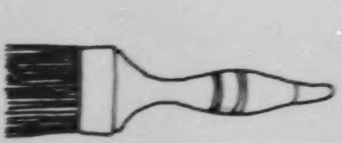
PIERCED SPOON



11 to 15 inches in length; stainless steel

Serving foods which need to be drained

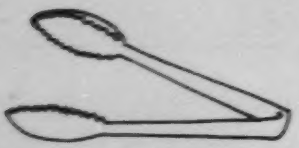
PASTRY BRUSH



Sterlized bristles held in place by rubber strip

Spreading melted butter or sauce on some food products

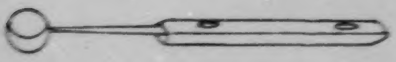
POM TONGS



9 to 12 inches in length

Handling food products such as ice cubes and rolls without touching them with hands; lifting and turning meats and vegetables

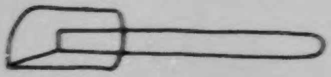
MELON BALL SCOOP



Stainless steel blade formed into half-ball cup

Cutting various fruits and vegetables into small balls

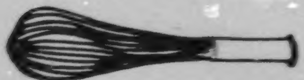
SCRAPER



9 1/2 or 13 1/2 inches in length; molded rubber attached to wooden or plastic handle

Folding and blending ingredients; scraping dishes, bowls, and plates

WIRE WHIP



10, 12, or 16 inches in length; stainless steel or chrome

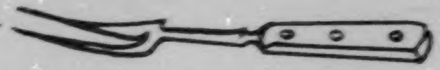
Stirring and whipping ingredients; incorporating air into ingredients (more effective than rotary beater or mixer)

QUESTIONS:

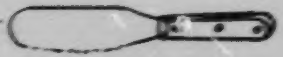
Identify the following pieces of equipment. Write the name of the equipment in the corresponding blank.

1. ____________________
2. ____________________
3. ____________________
4. ____________________
5. ____________________
6. ____________________

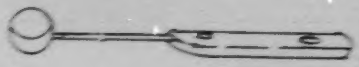
1.



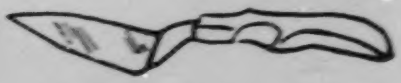
2.



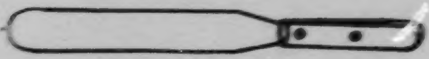
3.



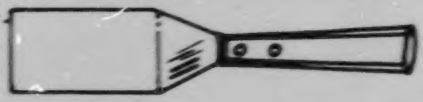
4.



5.



6.



Match the piece of equipment with the task. Place the letter corresponding to your choice in the blank to the left of the task.

_____7. spreading sandwiches

_____8. turning steaks or hamburgers

_____9. cutting meat loaf

____10. loosening food from pans

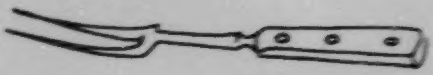
____11. holding meat while slicing

____12. serving pie

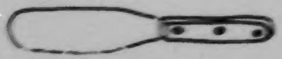
____13. turning a roast

____14. frosting cakes

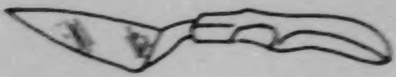
a.



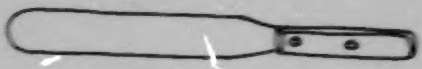
b.



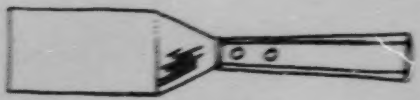
c.



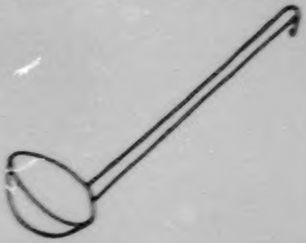
d.



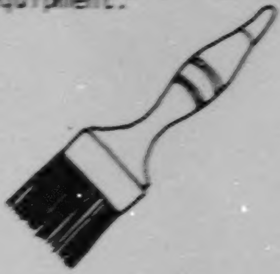
e.



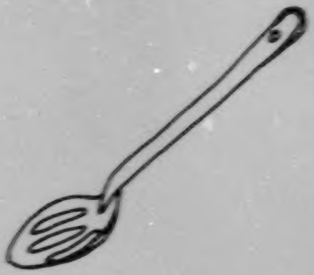
Identify these pieces of equipment and give their main use. Write your answers on the lines below each piece of equipment.



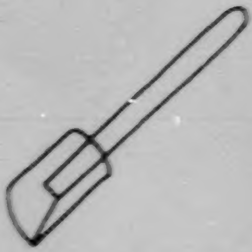
15. ____________________
____
____



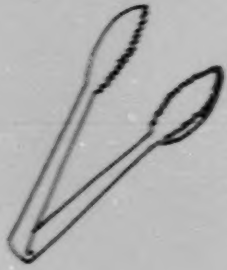
16. ____________________
____
____



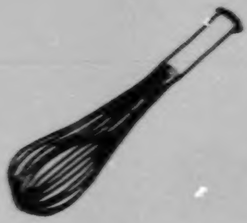
17. ____________________
____
____



18. ____________________
____
____



19. ____________________
____
____



20. ____________________
____
____

ASSIGNMENT:

I. Visit a food service supply store to note the labor saving "gadgets" available. Discuss your findings in class. Predict which may be used most or least. Which do you consider necessary? Desirable? Unnecessary? Which could be used at your training station?

GROUP WORK:

I. Divide into two teams. Listen as the leader reads excerpts from recipes. The first member in each group rings a bell if he knows what small utensil is needed for the procedure. The first to ring the bell answers. If an incorrect or incomplete answer is given, the other team gets a chance to answer. Rotate until all team members have had a chance to answer several times. The team giving the most correct answers wins the game.

UNIT IV-2

SMALL EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Knives

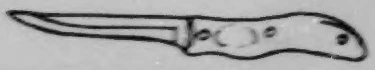
TASK: 8. Select proper hand utensil for specific food preparation tasks.

OBJECTIVES: When you finish this lesson, you should be able to
a. identify the correct knife for a specific task
b. describe safe procedures for using cutlery.

Though people differ in their ideas of which utensils are most necessary, nearly all agree that cutlery or knives are essential in every kitchen. Yet there are so many types of knives that selecting the right knife for a particular task can be a puzzling experience. The different kinds of knives have been made for specific uses. Selection of the best knife for each task can make the job easier and help to insure that the task is done correctly.

Illustrations and purposes of some of the most commonly used knives are described below.

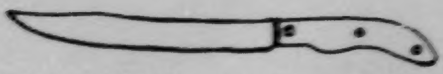
BONING KNIFE



5- to 6-inch blade made of stainless or carbon steel; wooden or plastic handle

Disjointing fowl;
separating meat from bone;
dicing raw meats;
coring lettuce

BREAD KNIFE

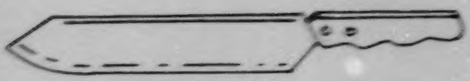


9-inch blade with serrated edge

Slicing bread or cake

HINT FOR USING: Hold bread or cake lightly and use a sawing motion with the knife.

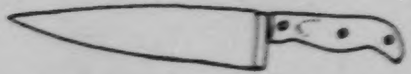
BUTCHER KNIFE



Slightly curved, heavy rigid blade with a blunt tip

Disjointing fowl;
preparing spare ribs, pork loin;
cutting brisket, short ribs from rib roast, chuck roast, rump;
cutting lobster, crawfish;
scaling fish; removing head of fish;
cutting sweet potatoes, cabbage, watermelon, squash

FRENCH KNIFE

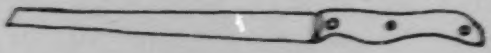


Slicing and cutting raw fruits and vegetables;
slicing hot or warm meat;
chopping small quantities of materials, such as parsley, onions, and nuts;
dicing and mincing ingredients

8- to 12-inch blade of crucible or stainless steel; wooden handle

HINT FOR USING: Hold point of knife on cutting board with one hand. Use other hand to lift handle of knife in an up-and-down slicing motion.

SLICER

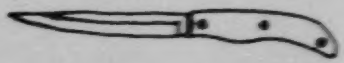


Slicing tomatoes, lettuce wedges;
slicing roast or ham;
cutting cakes or sandwiches

10- to 16-inch carbon or stainless steel blade which may be serrated; wooden or plastic handle

HINT FOR USING: When slicing meat, use back-and-forth sawing motion.

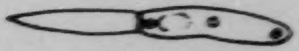
FRUIT AND SALAD KNIFE



Coring lettuce;
paring and sectioning fruits

5 1/2- to 6-inch stainless steel blade

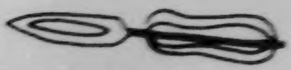
PARING KNIFE



Paring fruits and vegetables;
removing eyes from potatoes

3- to 3 1/2-inch blade of carbon or stainless steel

PEELER



Slicing thin strips of fruits and vegetables;
peeling fruits and vegetables

6-inch floating blade

Knives which are kept sharp are both easier and safer to use. Less pressure is required when the knife is sharp and there is less danger that the knife will slip.

Practices to follow which will help to keep knives sharp are:

1. Wash knives by themselves, rather than with other utensils.
2. Place knives in the dishwashing sink with the handles together and the blades pointed in the same direction.
3. Dry each knife separately and store in knife rack or a specified place in the drawer.
4. Use only for cutting and slicing, not for prying open jars or cans.

SAFETY PRACTICES IN USING CUTLERY*

Proper use and care of knives is an important factor in keeping knives in good condition. Following are some guidelines for using knives.

1. Use the correct knife for a particular job.
2. Use a cutting board whenever possible.
3. Always wash and wipe a knife from the back of the blade, being sure that fingers do not extend to the cutting edge.
4. Do not put a knife into water where it is not easily seen.
5. When carrying a knife, hold it with the point downward.
6. Do not use a knife as a lever to pry jar lids off or for other similar purposes.
7. Do not use a knife for cutting paper and string or for sharpening pencils.
8. If it is used effectively and thoughtfully, a sharp knife is safer than a dull knife.
9. Knives stored in racks or in slots in drawers can be picked up with more safety than those which are thrown into a drawer.
10. Do not use a knife to turn food, such as hamburger patties, steaks, pork chops, or pancakes, since heat damages the blade.

QUESTIONS:

Identify the knives in the illustrations on the right. Write the name of the knife in the corresponding blank.

1. a. ____________________

   b. ____________________

   c. ____________________

   d. ____________________

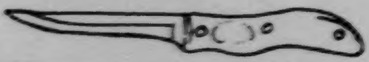
   e. ____________________

   f. ____________________

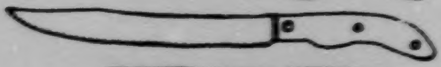
   g. ____________________

   h. ____________________

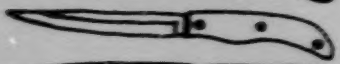
a.



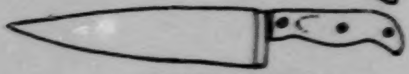
b.



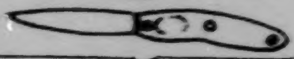
c.



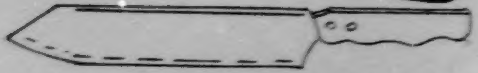
d.



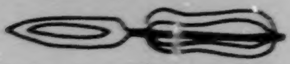
e.



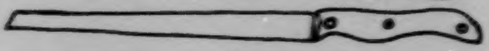
f.



g.



h.



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*U.S. Department of Agriculture. *Training Course Outline on Use and Care of Equipment*. Washington, D.C.: U.S. Government Printing Office, 1960. p. 132.

Write the letter of the knife illustrated in Question 1 that you would use for each of the tasks listed below.

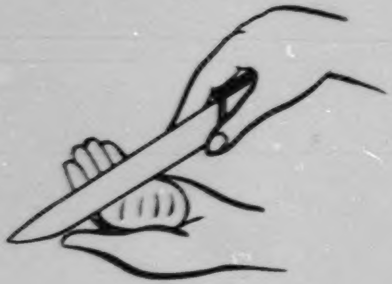
FOOD PREPARATION TASKS

_____ 2. cutting cakes
_____ 3. peeling carrots
_____ 4. coring lettuce
_____ 5. chopping parsley
_____ 6. slicing bread
_____ 7. paring and sectioning fruits
_____ 8. removing meat from the bones
_____ 9. cutting sandwiches
_____10. slicing raw fruits
_____11. paring fruits and vegetables
_____12. slicing tomatoes
_____13. dicing raw meat
_____14. cutting brisket, short ribs from rib roast

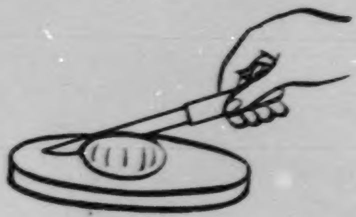
Select the correct practice in each of the following examples. Circle the letter of the correct practice.

15. Chopping

a.

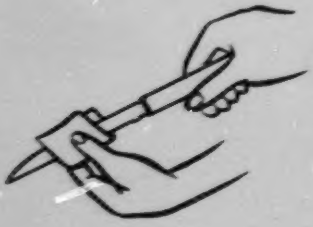


b.

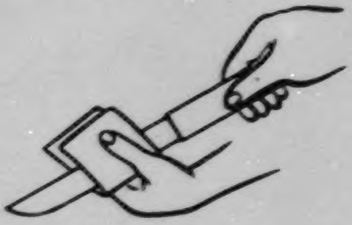


16. Washing or Wiping a Knife

a.

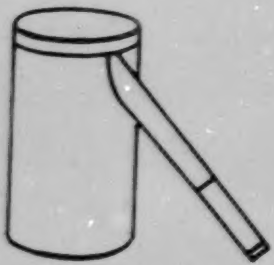


b.

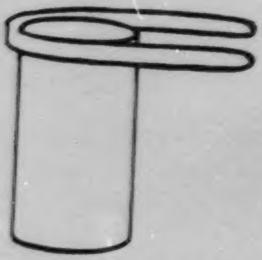


17. Opening a Jar

a.

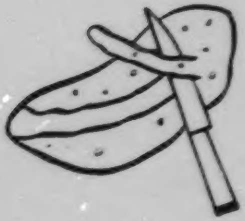


b.

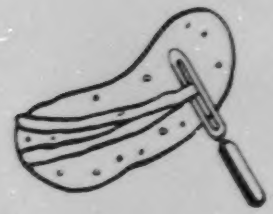


18. Paring a Potato

a.

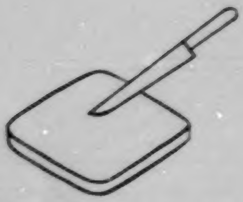


b.

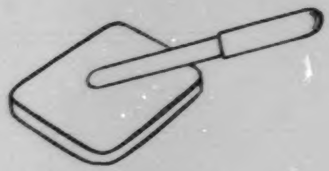


19. Spreading Sandwiches

a.

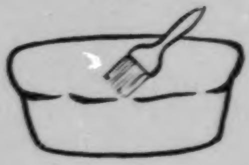


b.

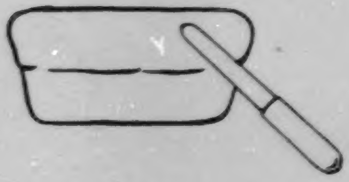


20. Spreading Melted Butter

a.



b.



ASSIGNMENT:

I. Prepare a bulletin board on safety practices to observe when using or caring for knives.

GROUP WORK:

I. In small groups produce skits to show ways that knife use affects a person's safety. Characters may be "Mr. or Ms. Careless" and "Mr. or Ms. Careful."

UNIT IV-3

SMALL EQUIPMENT FOR FOOD PREPARATION AND SERVICE

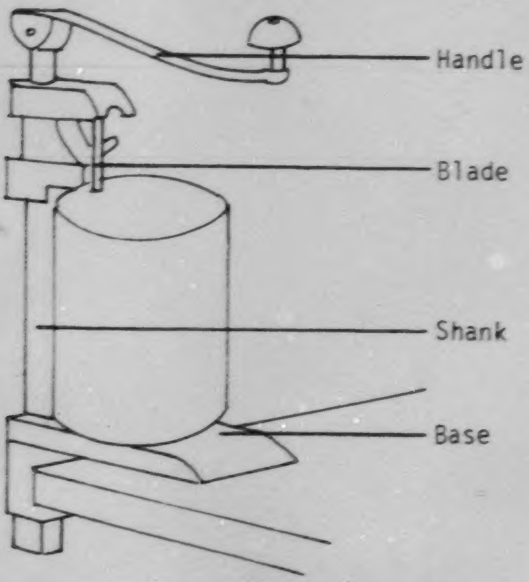
SUBJECT: Can Opener

TASK: 8. Select proper hand utensil for specific food preparation tasks.

OBJECTIVES: When you finish this lesson, you should be able to
a. state procedure for proper use and care of commercial can openers
b. summarize functions of the commercial can opener.

The commercial can opener is designed to remove the lids from cans ranging from small through institutional sizes. When properly used, the can opener will save time and energy.

BENCH-TYPE MANUAL CAN OPENER



To operate the bench-type manual can opener, lift the handle to vertical position until the cutting blade is about 1 inch above the can. Wipe off the top of the can with a damp cloth. Place the can on the base. With quick downward pressure, force the blade into the top near the edge. Lower the handle to horizontal position. To open the can, turn the handle clockwise until the blade cuts out the lid. Remove the lid before it falls into the can. Raise the handle to a vertical position. Lower the shank into the base of the can opener. Wipe off the blade of the can opener with a damp cloth after each operation. Food deposits that remain on a can opener not only cause off-flavors and odors in food but may also interfere with the operation of the can opener.

Clean the can opener daily. Remove the opener by lifting the shank out of the base. Soak the shank in a hot detergent solution and scrub the shank with a brush. Rinse the shank under hot running water and dry. Inspect the blade by checking for nicks and grooves which may cause metal shavings to drop into food. Following manufacturer's instructions, replace the old blade or badly worn blade with a new one. Keep the can opener in good repair so that it cuts sharply and leaves no ragged edges. To clean the base, wipe the base with a hot damp cloth. Give careful attention to the edge of the base.

For monthly cleaning of the can opener, clean and inspect the blade following the instructions for daily cleaning. Remove screws and the base. Scrub the blade, using a hot detergent solution; rinse and dry. Clean the table under the can opener by scrubbing with a hot detergent solution; use a scraper if necessary. Rinse and dry the table. Apply a very thin film of rust preventive (cooking oil) to the shank and bottom of base. To reassemble the can opener, screw the base back in place and replace the shank.

QUESTIONS:

1. What is the function of the commercial can opener?

2. Why is it important to check the blade of the can opener for nicks and grooves?

3. Why should the blade of the can opener be wiped off with a damp cloth after each operation between different food products?

ASSIGNMENT:

I. Make a check list to follow when cleaning the can opener. Include daily cleaning, inspection of the blade, cleaning of the base, etc. Compare your check list with the check lists prepared by class members.

GROUP WORK:

I. Work with other dietetic aides and brainstorm to identify purposes of caring for commercial can openers. Include such purposes as the appearance, sanitation, safety, increasing durability, and minimizing repairs of the can opener.

UNIT IV-4

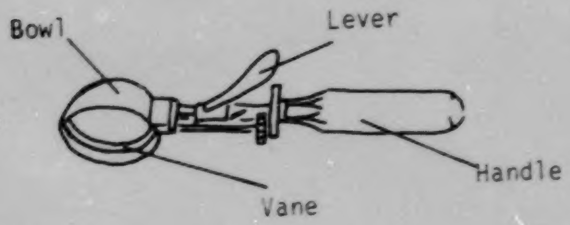
SMALL EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Dippers

TASK: 8. Select proper hand utensil for specific food preparation tasks.

OBJECTIVES: When you finish this lesson, you should be able to
a. identify parts of the dipper
b. list procedures for care of the dipper
c. list uses for various sizes of dippers.

DIPPER



Uses

The main function of the dipper is to portion food and thereby control the amount of food served. It is also used for shaping some foods.

Operation

When using the dipper, grasp the handle in the palm of your hand. Place the bowl of the dipper into the food and fill the dipper by pushing it against the side of the container which holds the food. This insures a level measurement. Do not round off or heap the dipper. Press the lever on the dipper with your thumb to release food onto the plate. The vane rotates around the bowl of the dipper to aid in releasing the food.

Special Care

To clean the dipper, wash it in warm detergent water. Use clear water with disinfectant added for rinsing. Drain and air-dry.

The chart below shows the uses of the various sizes of dippers and the number and sizes of portions per quart of food.

DIPPER SIZE	NUMBER OF PORTIONS PER QUART	SIZE OF PORTIONS (in oz., T., or c.)	USES
#6	6	6 oz. or 10 T.	luncheon-type salads
#8	8	4 to 5 oz. or 1/2 c.	luncheon foods, meats with sauces
#10	10	3 to 4 oz. or 6 T.	pudding-type desserts, ice cream, hot cereals, some vegetables, meat balls, meat patties
#12	12	2 1/3 to 3 oz. or 1/3 c.	meat salads, vegetables, muffin batter, desserts
#16	16	2 to 2 1/4 oz. or 1/4 c.	muffin batter, desserts
#20	20	1 3/4 to 2 oz. or 3 T.	muffin and cupcake batter, various sauces, and gravy
#24	24	1 1/2 to 1 3/4 oz. or 2 2/3 T.	cream puffs, cookies
#30	30	1 to 1 1/2 oz. or 2 T.	drop-type cookies

QUESTIONS:

Study the diagram of the parts of the dipper. Match the letter of the dipper parts with the statements in Items 1 through 4.

STATEMENTS

_____1. The dipper is held by the _____.
_____2. The food is measured in the _____.
_____3. The _____ rotates when the
_____4. _____ is pressed, releasing the food.

DIPPER PARTS

a. Vane
b. Lever
c. Handle
d. Bowl

5. Change the following portion servings from ounces to tablespoons or parts of a cup:

OUNCES		TABLESPOONS OR PARTS OF CUP
a. 6 oz.	=	
b. 4 to 5 oz.	=	
c. 3 to 4 oz.	=	
d. 2 1/3 to 3 oz.	=	
e. 2 to 2 1/4 oz.	=	
f. 1 3/4 to 2 oz.	=	
g. 1 1/2 to 1 3/4 oz.	=	
h. 1 to 1 1/2 oz.	=	

The number of ounces per serving determines the number of servings per quart. Using the table in the reading materials, match the number of ounces per serving with the resulting number of servings per quart in Items 6 through 13.

	OUNCES PER SERVING	SERVINGS PER QUART
_____ 6.	1 to 1 1/2 oz.	a. 8
_____ 7.	1 1/2 to 1 3/4 oz.	b. 16
_____ 8.	1 3/4 to 2 oz.	c. 20
_____ 9.	2 to 2 1/4 oz.	d. 6
_____10.	2 1/3 to 3 oz.	e. 12
_____11.	3 to 4 oz.	f. 24
_____12.	4 to 5 oz.	g. 10
_____13.	6 oz.	h. 30

14. What is the relationship between the number of servings per quart and the number of the dipper size?

15. Give the number and size of servings per quart that the following sizes of dippers serve.

DIPPER SIZE	NUMBER SERVINGS PER QUART	SIZE IN OUNCES
a. # 12	____________	____________
b. # 16	____________	____________
c. # 6	____________	____________
d. # 10	____________	____________
e. # 8	____________	____________
f. # 24	____________	____________
g. # 20	____________	____________
h. # 30	____________	____________

For each food and serving size listed locate the appropriate dipper size. Use each letter only once.

FOODS AND SERVING SIZE

_____16. Muffin batter, desserts;
2 to 2 1/4 oz. or 1/4 c.
portions
_____17. Pudding-type desserts, meat
patties, meatballs,
vegetables, hot cereals;
3 to 4 oz. or 6 T. portions
_____18. Luncheon-type salads
6 oz. or 12 T. portions
_____19. Muffin and cupcake batter,
sauces, and gravy;
1 3/4 to 2 oz. or 3 T. portions
_____20. Luncheon foods, meats with sauces;
4 to 5 oz. or 1/2 c. portions
_____21. Cream puffs and cookies;
1 1/2 to 1 3/4 oz. or 2 2/3 T. portions
_____22. Meat salads, vegetables, muffin
batter, desserts, salads;
2 1/3 to 3 oz. or 1/3 c. portions
_____23. Drop-type cookies;
1 to 1 1/2 oz. or 2 T. portions

DIPPER SIZE

a. # 6
b. # 8
c. # 10
d. # 12
e. # 16
f. # 20
g. # 24
h. # 30

24. Suzie had been using the # 10 dipper to portion the chocolate pudding for the evening meal. The steps she should use to clean the dipper are:
a.
b.
c.
d.

ASSIGNMENT:

I. List the sizes of dippers which you often use at your training station. What food items are the dippers used for? Compare your list with those of other dietetic aides to learn the uses of dippers in other training stations.

GROUP WORK:

I. In small groups, brainstorm to identify the advantages of using dippers in food preparation. One advantage would be to control the amount of food served. What other advantages can you think of?

UNIT IV-5

SMALL EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Weighing and Measuring Equipment

TASK: 9. Measure and weigh foods according to specifications listed in standard recipes.

OBJECTIVES: When you finish this lesson, you should be able to:

a. list procedures for using standard weights and measurements accurately and correctly
b. describe procedures for use and care of scales and balances.

REFERENCE: Cornelius, Ethelwyn G. *Food Service Careers*. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1974. pp. 102-103.

The dietetic aide should become familiar with the procedures and measurements which are used for measuring ingredients at his training station. Selection of the proper measuring equipment is a primary factor in being able to prepare standard food products consistently. After choosing the appropriate measure for the task involved, the dietetic aide must develop skill in using it correctly.

Quality in food production cannot be achieved unless the amounts called for in the recipe are measured carefully. Measurements of ingredients must be level in order to be accurate. Suggestions for using measuring equipment are given in this unit.

Types of measures include:

1. U.S. Standard graduated dry measuring cups -- stainless steel or aluminum preferred

   Set or "nest" of four measures including 1 cup, 1/2 cup, 1/3 cup, and 1/4 cup

2. Liquid measuring equipment -- glass or clear plastic recommended; the space at the top above the graduated measurements prevents spilling the liquid

   1 cup size with lines indicating 1/4 cup intervals

   1 pint size with lines indicating cup intervals

   1 quart size with lines indicating cup intervals

   2 quart size with lines indicating cup intervals

   1 gallon size with lines indicating quart intervals

3. Measuring cup for either liquid or dry ingredients -- has limited use for dry ingredients because only full cup measurements can be leveled off

   1 cup measure with fractions indicated by ridges on the outside and grooves on the inside

4. Measuring and mixing bowl set

   1 cup, 1 1/2 pint, and 2 quart containers which have tapered pouring spouts

5. Measuring spoons

   U.S. Standard graduated set including 1/4 teaspoon, 1/2 teaspoon, 1 teaspoon, and 1 tablespoon

Suggestions to be considered in using the various types of measuring equipment are the following:

1. Cups which have the rim above the "full cup" line and a pouring lip or spout are used for measuring liquids.

2. Cups without the rim or pouring lip are used for measuring dry ingredients and shortening.

3. Graduated spoons are used for measuring small amounts of liquids and dry ingredients.

4. Larger measures are used, whenever possible, to avoid filling the smaller measure several times.

How to Measure:

1. Flour	Sift flour before measuring to make it light and to remove any lumps. Spoon or scoop sifted flour gently into cup. Do not shake, pack, or hit the side of measuring cup. Move a straight edge knife or spatula across top edge of measuring container to remove excess flour.
2. Confectioner's sugar	Measure in the same way as flour.
3. Brown sugar	Pack firmly into measuring container (unless stated otherwise) to insure accuracy of the measurement. When loosely packed, the amounts of brown sugar vary from one measuring to the next.

4.	Fats	Measure by pressing firmly into measuring container and leveling off.
5.	Liquids	Place measuring cup on a flat surface and read measurement at eye level.
6.	Few grains, speck, or a pinch	Use amount of the ingredient which can be held between thumb and forefinger.
7.	Fractions of a teaspoon or tablespoon	Fill and level a teaspoon or tablespoon if the correct size spoon is not available. Run a knife lengthwise through the center of the spoon for a 1/2 spoonful measure and then crosswise through the center of the spoon to divide the ingredients into 1/4 spoonfuls.

Tips to be followed in the care of measuring equipment:

1. Wash thoroughly and dry after each use.

2. Use plastic measures carefully because they warp easily and are then no longer accurate.

3. Handle glass measures carefully because they chip easily.

4. Care for measuring spoons by using them only for measuring -- not for mixing or stirring.

5. Store measuring equipment carefully because bent measures are no longer accurate.

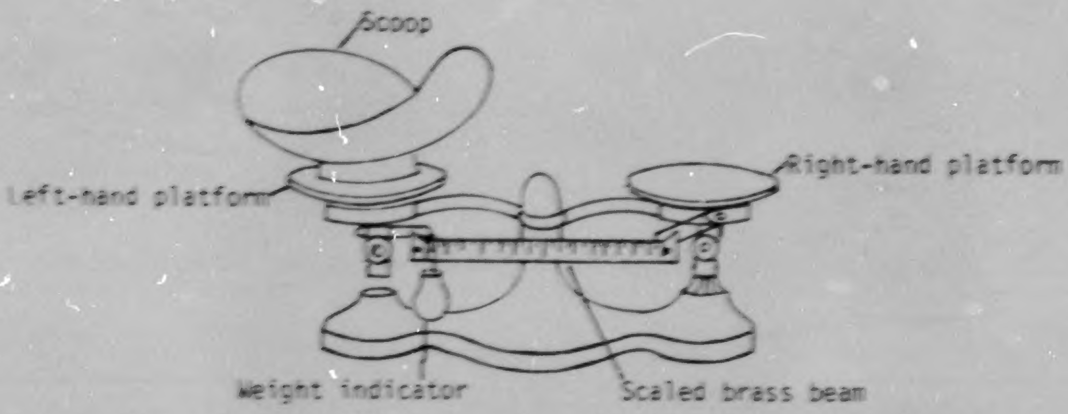
Functions of Scales and Balances

Scales and balances are used in quantity food preparation to save time and assure accuracy. Because ingredients are not all the same weight, it is not always correct to say that 2 cups of an ingredient equal 1 pound. When the amounts in a recipe are expressed in ounces or pounds, it is important that ingredients be weighed instead of measured.

Scales and other equipment used for weighing must be kept clean. This may be done by wiping the scale with a damp cloth after weighing each ingredient. At the end of the day, weighing equipment should be checked to see that ingredients have not accumulated on it.

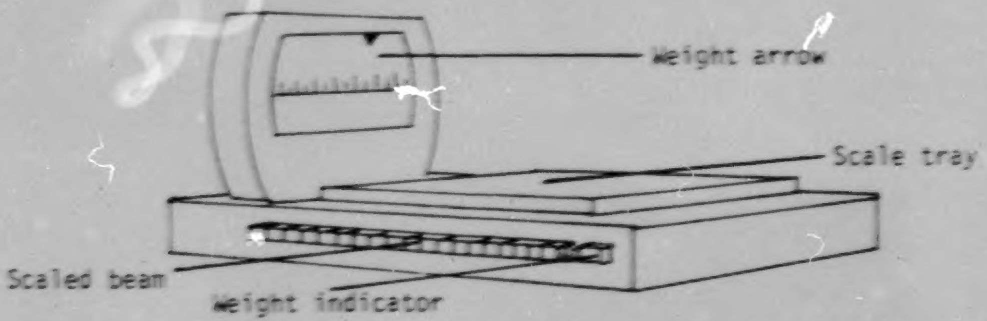
Several acceptable types or models of scales and balances are used in food service. These include (1) the spring-type model which is used for weighing dry ingredients, such as beans, macaroni, rice, cheese, fruits, and vegetables; (2) the gravity-activated type, called the balance scale, which is used for weighing batters and mixes; (3) the portion scale which is used for weighing portions of food and rolls; (4) the baker's scale which is used for weighing ingredients or for scaling dough. For instance, dough for a loaf of bread is weighed for uniform sized loaves.

BAKER'S SCALE



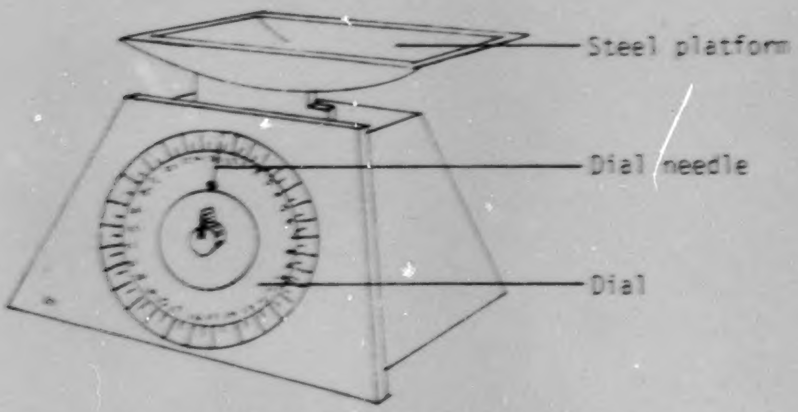
To operate the baker's scale, place the weight indicator at zero on the scaled brass beam which indicates ounces up to 1 pound. Center the scoop on the left-hand platform. Balance the scoop by placing the proper weight on the right-hand platform. Weights are used to balance the two platforms. The left platform should be slightly lower than the right platform. Move the weight indicator on the brass beam to the right until the desired weight is found and the two platforms are balanced. The ingredients to be weighed are placed in the scoop on the left-hand platform. If necessary, add or remove a portion of the ingredients to make the platforms balance. When the weighing procedure has been completed, remove the ingredients or food items being weighed and return the scales to a balanced position.

PORTION SCALE



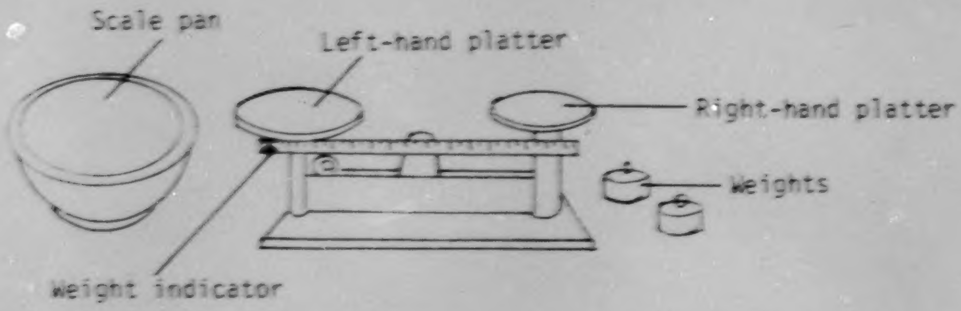
To operate the portion scale, place the weight indicator in the groove along the scaled beam for on the desired portion size. Place the product on the scaled tray. Check the weight arrow to see if the portion needs to be increased or decreased.

SPRING-TYPE SCALE



To operate the spring-type scale, place the product to be weighed on the steel platform. The rotating dial needle indicates the weight of the product. The dial on the front of the scale is graduated from 1/4 ounce to 32 ounces.

BALANCE SCALE



To operate the balance scale, remove all weights from the right-hand platter. Remove the scale pan from the left-hand platter. Place the weight indicator into the zero notch. Platters should come to rest in a position level and opposite to each other. (When scales are in a balance position, touching either platter should cause both platters to move in an up-and-down motion before again coming to rest in the balance positions.) Select weights appropriate for the measurement and place them on the right-hand platter. Place the weight indicator in the proper notch. Placing the weight on the scales will cause the right-hand platter to swing downward and rest on the frame of the scales. Place the food item on the left-hand platter in an amount just sufficient to bring scales into a balance position. (The item to be measured can be added in relatively large amounts until the scales begin to swing into a balance position. Smaller amounts should be added until the exact balance position is accomplished.)

Clean the scales daily by wiping the platter or platform with a damp cloth. Wash the scoop-like pan of the scale after each use with detergent water and a clean cloth. Let the scales air-dry.

QUESTIONS:

1. All measurements must be level to be accurate. Describe the procedure used to level dry measurements.

2. Why is it recommended that both glass and metal measuring cups be used in food preparation?

3. Why should brown sugar be packed firmly when measuring?

4. Fractional measurements are possible without a measuring spoon of that specific fraction. Explain how you would measure 1/8 teaspoon allspice.

5. Why is flour sifted before measuring?

6. Why should standard measures be used in food preparation?

7. Why is weighing ingredients recommended for quantity food production?

For each function listed locate the type scale associated with it. Place the letter corresponding to your choice in the blank to the left of each function. Use a letter only once.

FUNCTION

_____ 8. Weighing servings of food and rolls

_____ 9. Weighing dry ingredients such as beans, macaroni, rice, cheese, fruits, and vegetables

_____10. Weighing ingredients or scaling dough

_____11. Weighing batters and mixes

SCALES

a. Baker's scale

b. Balance scale

c. Portion scale

d. Spring-type scale

ASSIGNMENT:

I. Identify the type of scales and balances used at your training station. Explain the use and care of the scales.

GROUP WORK:

I. In small groups, make a list explaining the use of devices, such as measuring cups, scales, and balances in food preparation. How does each save time and assure accuracy? The groups should then compare lists.

UNIT V-1

LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Cleaning and Disposal Equipment

TASK: 10. Select and correctly use proper piece of equipment for a specified job in food preparation and service.

OBJECTIVES: When you finish this lesson, you should be able to

a. identify parts of the commercial dishwasher
b. describe procedure for operation of a commercial dishwasher
c. list precautions in using and carrying for the commercial dishwasher
d. describe use and care of a garbage disposal.

REFERENCE: Cornelius, Ethelwyn, G. Food Service Careers. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1974. pp. 289, 294-298.

COMMERCIAL DISHWASHER AND POT AND PAN SINK

The use of mechanical dishwashing in dietary kitchens has grown tremendously in recent years. Mechanical dishwashing is more effective and faster than hand dishwashing and takes less personnel to do the job.

There are many types of mechanical dishwashing machines, but all of them require the same basic steps for effective dishwashing. These steps are scraping, prewashing, racking, washing (in machine), rinsing, sanitizing, air-drying, and clean storage of the utensils until the next use.

The types of dishwashing machines generally fall into two categories, commonly referred to as single-tank and multiple tank machines. Single-tank machines are used either in smaller establishments or for specialized operations in larger establishments. The machines have a single tank for wash water. The tank varies in capacity depending on the manufacturer and the particular model of the machine. The pump recirculates the wash water to spray each rack of dishes placed in the machine.

The two most common single-tank machines are the door-type and the conveyor-type. The door-type machine has two doors that can be raised and lowered to admit dishes into the machine. Usually these two doors are interlocked so that if one door is raised or lowered, the other is also raised or lowered. When lowered into place, the doors provide a watertight compartment in which washing can occur without splashing wash or rinse water outside the machine. The other single-tank machine is the conveyor-type. Racks filled with utensils and tableware move through the machine on a conveyor chain, a continuous moving belt.

The multiple-tank machines are used in large food establishments where large numbers of utensils are washed. They are manufactured in several sizes which are capable of washing from 6,000 to 18,000 utensils per hour. The most commonly used multiple-tank dishwashing machines are the flight-type machines.

Instead of utensils and tableware being conveyed through the machine in racks, the utensils and tableware are placed individually on a continuous belt that carries them into, through, and out of the machine.

The conveyor belts on the dishwashing machines are continuous and return underneath the machine to be reloaded with more utensils or racks of utensils. Operators are located at the start of the machine to load the conveyor belt with utensils; and one or more operators are located at the exit end of the machine to remove the utensils from the belt before it passes underneath the machine for a return trip. Since the utensils are at a temperature of nearly 180° F. (85° C.), which is too hot for the hands, the workers should use clean asbestos gloves to protect their hands from the heat of the utensils.

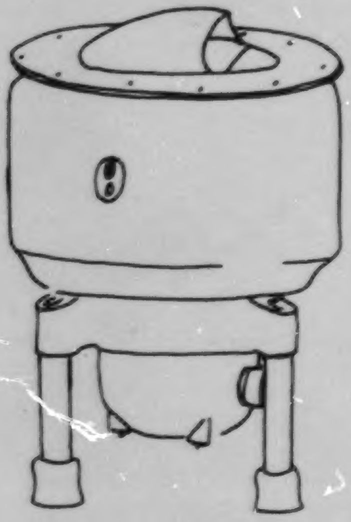
It is important to follow the directions for the operation and care of the particular dishwashing machine at your training station. General instructions for the operation and care of dishwashers are given in the reference (Cornelius, pp. 294-298).

Cleaning of large or bulky utensils, such as pots and pans, requires conscientious effort on the part of employees. It is just as important to wash and sanitize the pots and pans as any other utensil used in either the preparation or serving of food. Pots and pans are usually washed in a three compartment sink. One of the compartments is used for washing, another for rinsing, and the third for sanitizing. The sanitizing techniques are essentially the same as for other utensils.

Clean the dishwashing equipment thoroughly at the end of each washing period and have the equipment ready for the next shift. General instructions for cleaning a dishwashing machine are given in the reference (Cornelius, pp. 296-298).

GARBAGE DIS[illegible]L

The sanitary disposal of waste is of great importance to the operation of a dietary kitchen. One of the best ways to do this is to use a garbage disposal because garbage is ground to a pulp and is carried into the sewer line.



To operate the garbage disposal, press the "On" switch. This turns on the water and starts the action of the knife blades which do the grinding. Feed garbage into the disposal gradually, being careful not to overload the machine. Check to see that there are no large bones, corn cobs, cabbage cores, silverware, or other items which would damage the knives in the disposal. Keep fingers and hands away from knife blades.

When the grinding action is completed, allow the machine to run at least 5 minutes longer to make sure that all garbage has been washed away from the knife blades.

To clean the disposal, turn the switch to "Off" position. Remove the cover and wash the inside and outside with water and a mild detergent. Rinse interior with clear water and dry.

When a garbage disposal is not available, keep the garbage covered in sanitized garbage cans. The containers should be covered with tight-fitting lids or covers. Plastic bags are now used as liners to keep the containers cleaner. After the containers have been emptied, clean the inside and outside thoroughly. This cleaning should be done in a place where food, equipment, utensils, or food preparation areas will not be contaminated.

Refrigeration of garbage delays decomposition and prevents odor. All waste should be removed from the premises daily.

QUESTIONS:

1. List the basic steps for effective dishwashing.

2. The two catagories of dishwashing machines are ______________________________ and ______________________________.

3. How should cups and glasses be placed in the dishwashing machine?

4. An important rule to remember when loading the dishwasher is:

5. How should silver be placed in the silver racks?

6. What is the recommended temperature for wash water used in the dishwashing machine?

7. What are the three compartments of the pot and pan sink used for?

   a.
   b.
   c.

Place an X in the blank by the letter of the phrase that best completes the sentence.

8. The most adequate means of waste removal from a dietary kitchen is by
   _____a. selling it to local farmers.
   _____b. a garbage disposal unit.
   _____c. an incinerator.

9. When the garbage disposal is turned "On," water flows into it and the grinding blades are
   _____a. activated.
   _____b. stationary.
   _____c. suspended.

10. The garbage should be fed into the machine
    _____a. all at once.
    _____b. rapidly.
    _____c. gradually.

11. To be certain all garbage is washed away from the blades, the machine should run for five minutes after
    _____a. the water is turned off.
    _____b. all food has been ground.
    _____c. the blades have stopped.

12. To prevent odor from garbage when a disposal is not available, the covered garbage cans may be stored
    _____a. in the walk-in refrigerator.
    _____b. outside the back door.
    _____c. in a closet.

ASSIGNMENT:

I. Analyze the procedure you use when washing dishes. What can you do to improve your organization of this task? (Consult the reference for ideas.)

GROUP WORK:

I. Compare the type of dishwashing machine used at your training station with the types used by other dietetic aides.

II. View a film or observe a demonstration on the operation of dishwashing machines. Compare the operation of the dishwashing machine in the film or in the demonstration with the one used at your training station.

UNIT V-2

LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Cold Storage Equipment

TASK: 10. Select and correctly use proper piece of equipment for a specified job in food preparation and service.

OBJECTIVES: When you finish this lesson, you should be able to
- a. state procedure for proper use and care of cold storage equipment
- b. describe trouble signals in refrigeration.

REFRIGERATORS

A refrigerator cools food and keeps it cool. A temperature below 45° F. (7.2° C.) in the refrigerator helps to prevent spoilage of leftover food by removing the heat as soon as possible. It also serves to chill those foods which taste better when eaten cold. In addition to the household size refrigerators, dietary departments use both walk-in and reach-in refrigerators. Smaller refrigerators may be located away from the regular food preparation area for convenience in serving desserts, salads, and butter. The pass-through refrigerator is used between the kitchen and the serving area. Food items, such as salads, can be made in the food preparation area and placed in the pass-through refrigerator. Serving personnel can open the door on their side of the pass-through refrigerator and obtain the prepared food. The pass-through refrigerator saves steps for food preparation and serving personnel.

Storage in the Refrigerator

Temperatures vary in different parts of the refrigerator. These variations are due to the circulation of air near the cooling coils. It is important, then, that refrigerators not be crowded. Containers should be placed so that the circulation of air is not hampered.

Guidelines for Proper Storage in Different Areas of the Refrigerator

COLD	COLDER	COLDEST	FREEZING COMPARTMENT
Raw fruits Vegetables	Cooked meats Eggs Butter Cooked foods containing any of above ingredients	Milk Cream Raw meat, fish, poultry	All frozen foods, desserts to be frozen

Hints for Best Refrigeration of Foods

1. Containers should be dry and covered before they are placed in the refrigerator.
2. Doors should be opened only when necessary. Outside air carries moisture and causes frost to form.
3. Hot food should be placed in the refrigerator to speed cooling.
4. Do not obstruct mechanical units. Place food so that it does not crowd the cooling unit. Keep rags, aprons, and trays off the equipment enclosure.

Safety Precautions

Do not attempt to adjust, repair, or lubricate any electrical or mechanical parts of refrigerators. If these parts are not performing properly, notify your supervisor.

Trouble Signals to be Reported to the Supervisor Include:

1. Excessive cooling indicated by frosting on coils
2. Unusual noises or vibrations
3. Failure to operate or maintain temperature

Care of Refrigerators:

Clean the reach-in refrigerator daily by wiping up immediately any food that has spilled. With a damp cloth wipe the inside and outside of the doors and door gaskets, and the exterior of the refrigerator.

The weekly procedure for cleaning the reach-in refrigerator is to turn off the switch and disconnect the plug from the outlet. Remove food from the refrigerator and cover or wrap the food to minimize temperature changes. To clean the interior of the refrigerator, wash the shelves, walls, and inside of the doors with warm water. Add baking soda (1 tablespoon baking soda to one quart of water) to prevent odors. Do not use vinegar, salt, or caustic agent (any chemical that burns or eats away) in cleaning solutions. Wash the exterior of the refrigerator with a hot detergent solution. Rinse with water to which a sanitizer has been added. Dry with a clean dry cloth. Polish the exterior as needed. Do not use powders that will scratch the finish in cleaning the refrigerator. Do not use ammonia or scouring pads. Inspect foods carefully for quality. Do not return slightly spoiled or contaminated food to the refrigerator. Insert the plug and turn on the switch of the refrigerator.

The walk-in refrigerator should be cleaned daily by wiping up immediately food that has spilled. The inside and the outside of doors should be wiped with a damp cloth.

The weekly procedure for cleaning the walk-in refrigerator is to turn off the switch, remove the plug from the outlet and remove the food. The food should be covered or wrapped to minimize temperature changes. Using a stiff brush, remove and wash all portable equipment with a hot detergent solution. Pull out and wash the shelves with the solution. Rinse and dry. Clean the interior of the walk-in refrigerator by scrubbing the walls, door, stationary equipment, and floors with a hot detergent solution and a stiff brush and mop. To keep walk-in refrigerators free of odors; use a sanitizer. Rinse thoroughly. Flush drain pipes with hot water and baking soda. Wash the exterior with hot detergent solution. Rinse with water that contains a sanitizer, and dry the surface. Use a clean mop and mop the floor with warm water and a sanitizer. Inspect foods carefully for quality. Put foods in clean container and return them to the refrigerator. Insert the plug and turn on the switch.

Defrost refrigerators when frost is 1/4-inch thick on coils or other parts of the interior. If necessary, see the manufacturer's directions for specific instructions. Always clean the refrigerator after defrosting.

Thermometers should be provided on all refrigerators, and temperature readings should be taken daily. Many walk-in refrigerators have a recording-temperature which registers the temperature throughout a twenty-four hour period. Alarm bells or signals are placed on walk-in refrigerators to operate when the refrigerator is not functioning. The following temperature ranges are a guide when separate refrigeration is available for different types of food: dairy products 38° - 45° F. (3.3° - 7.2° C.); fruit and vegetables 44° - 45° F. (6.6° - 7.2° C.); meat and poultry 33° - 36° F. (.5° - 2.2° C.). Where one refrigerator is used for all refrigerated storage, a temperature of 35° - 45° F. (1.7° - 7.2° C.) is recommended.

Guide to Using Refrigerators

1. Check to see that door of a walk-in refrigerator opens from the inside.
2. Open refrigerator door only when necessary. Collect all items needed at one trip by using a wheeled cart.
3. Place foods used most frequently nearest the door.
4. Place foods in the proper section of the refrigerator, since various food items require different degrees of temperature and humidity.
5. Use same general area of the refrigerator for the storage of specific foods, thus avoiding hunting around which causes loss of cold air.
6. Store foods that absorb odors away from those foods that give off odors.
7. Avoid crowding refrigerator, as good air circulation is of major importance. Overloading also causes the temperature to rise.
8. Bring older foods toward front so that they will be used first. Immediately remove foods showing signs of spoilage.
9. Cooked foods require quick cooling and should be refrigerated within 2-3 hours to avoid danger of food-borne illness.
10. Do not store foods that do not need refrigeration in refrigerator.
11. Stack rectangular pans criss-cross to provide more shelf space.
12. Store food properly in the refrigerator: cover cooked foods; cover most raw foods; loosely cover raw meat; store salad greens in large polyethelene bags; always remove outer wrapping that would interfere with air circulation and might introduce contamination.
13. Wipe up water and spilled foods immediately.

FREEZERS

Store frozen food at 0° F. (-17.8° C.) or lower. Frozen food held at temperatures above 0° F. (-17.8° C.) looses color, flavor, and other quality factors. Check the temperature of the freezer frequently, as quality loss occurs quickly as temperatures rise.

Frozen food should be solidly frozen when it is received. Purchase frozen food from a source that has stored it at 0° F. (-17.8° C.) or lower, and do not accept damaged packages or ones with frozen ice crystals on the outside, which indicate thawing and refreezing. Broken wrappings may lead to moisture loss and drying out and may also indicate careless handling and storage. Place frozen foods in the freezer as soon as they are received and date the packages so that the oldest items are used first. All items placed in the freezer should be wrapped to prevent freezer burn or dehydration, which is the loss of water from foods.

Refreezing of frozen foods is unwise because of possible undesirable changes in flavor, color, or texture. Frozen food that has completely thawed should not be refrozen without cooking because there may have been growth of bacteria.

Freezing of food should be done rapidly at a very low temperature. Minus 40° F. (-40° C.) is a temperature used by commercial freezing operations. Food can be frozen satisfactorily at 0° F. (-17.8° C.) if the amount of food to be frozen is limited so that quick and efficient freezing is possible.

Thermometers should be provided on all freezers. Temperature readings should be taken daily to check the performance of the freezer. The walk-in freezer should have an alarm system which may be sounded in case of accidental entrapment. Bells or signals should be placed on freezers to sound when the freezer is not functioning.

Care of Freezers

Clean the freezer daily by wiping the exterior with a damp cloth. Once a week wash the exterior of the freezer with a hot detergent solution. Rinse the exterior with a water and sanitizer solution and dry the surface.

Defrost the freezer once or twice a year as needed, when frost becomes 3/8-inch to 1/2-inch thick on sides or coils. When defrosting the freezer, disconnect the freezer by removing the plug from the outlet. Remove all food packages; cover or wrap them and place them in the walk-in refrigerator, if possible. Scrape as much frost as possible from the surfaces with a broad, stiff plastic spatula or a special tool. Use caution when scraping ice; never use a knife, ice pick, or other sharp objects. You may use cold water to run over the refrigerated surfaces. Never use hot water. Removing the ice from the surface at intervals, as it loosens, speeds the defrosting process. Wash the interior and inside of doors with warm water and baking soda (1 tablespoon baking soda to 1 quart of water). To keep freezers free of odors, use a sanitizer. To clean the exterior, wash with a hot detergent solution, rinse with a water and sanitizer solution, and dry. Insert the plug; then turn on the switch. Let the freezer run for at least half an hour to bring the temperature down.

Inspect food packages and containers to make certain they are in good condition. Take an inventory and place older packages and containers at the front or top of the freezer for use first.

Guide for Using Freezers*

1. Open freezer door only when necessary; make certain door is closed tightly and sealed. Collect all items needed at one trip by using wheeled cart.
2. Store foods in original shipping containers, if possible, to reduce the possibility of freezer burn and drying out of the foods.
3. If the original containers have been damaged or if space does not permit storing in shipping containers, rewrap individual packages of foods in moisture-vapor-proof packaging material before placing in freezer.
4. If frozen foods have thawed, do not refreeze. If in quality condition, use immediately or refrigerate and use within 24 hours.
5. When freezing freshly cooked foods, chill food promptly and thoroughly; then package in moisture-vapor-proof materials or containers to exclude air and prevent loss of moisture. To assure uniform and rapid freezing, place packages in contact with freezing surface and not with each other.
6. Do not open freezer if current goes off. If the current is off for more than 48 hours, wrap dry ice in paper; open lid or door just long enough to put dry ice over food and close immediately. If current remains off for more than 48 hours, move food to 0° F. (-17.8° C.) storage; make transfer quickly and with as little handling as possible.
7. When defrosting, do not chip ice off with ice pick or other sharp tool that might damage liner surface or coils. Use broad, stiff spatula; putty knife; or special tool. Do not use hot water.
8. After defrosting, inspect food packages and containers to make certain they are in good condition. Take an inventory and place older packages and containers at front or top of freezer for use first.

Safety Precautions for Cold Storage Equipment

Do not attempt to adjust, repair, or lubricate any electrical or mechanical parts of refrigerators or freezers. If these parts are not performing properly, notify the supervisor. Some trouble signals to be reported to the supervisor include: excessive cooling indicated by frosting on the coils, unusual noises or vibrations, failure to operate, or failure to maintain proper temperature.

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*U.S. Department of Agriculture. Training Course Outline On Use and Care of Equipment. Washington, D.C.: U.S. Government Printing Office, 1960. p. 102.

QUESTIONS:

1. When storing food in the refrigerator, you should place items so that air may ____________ freely around containers.

2. In order to prevent refrigerated food from drying out, you should ________________ all containers.

3. Opening the door of a refrigerator only when necessary helps prevent ____________ formation.

4. Raw meats, fish, and poultry should be stored in the _______ part of the refrigerator.

5. Frost should be removed from the refrigerator when it has built to a _________-inch thickness.

6. Door gaskets should be wiped clean ______________.

7. A solution of _________________ may be used to help prevent odors in the refrigerator.

8. Frozen food should be stored at _____________ or lower.

9. To prevent dehydration, you should ____________ all food items placed in the freezer.

10. Older packages and containers should be arranged in the freezer for use _____________.

11. When it has built to a ________________ thickness on sides or coils, frost should be removed from the freezer.

ASSIGNMENT:

I. List the cold storage equipment which you use at your training station. What procedures do you often use at your training station? What procedures do you follow in the care of these pieces of equipment?

GROUP WORK:

I. With other dietetic aides, discuss the procedures used at training stations for use and care of cold storage equipment. Compare the safety precautions followed when cleaning the equipment.

II. View a filmstrip or observe a demonstration on the principles of refrigerated food storage. Compare the procedure for food storage shown in the filmstrip or demonstration with the procedure used at your training station.

UNIT V-3

LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Beverage Equipment

TASK: 10. Select and correctly use proper piece of equipment for a specified job in food preparation and service.

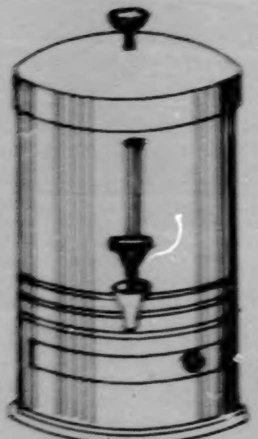
OBJECTIVES: When you finish this lesson, you should be able to
a. identify parts of coffee makers
b. describe procedures for operation and care of coffee makers
c. describe procedure for making tea
d. explain procedures for care of pumps and dispensers
e. summarize procedures for care of ice making machines.

REFERENCE: Cornelius, Ethelwyn G. Food Service Careers. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1974. pp. 142-143.

In dietary kitchens, coffee is generally made in either a coffee urn, a vacuum coffee maker, or an automatic coffee brewer. Before operating the equipment, read the directions for use of the equipment or observe someone demonstrating its use.

Coffee makers for instant coffee are also available. These may be made of stainless steel, silver, nickel, chrome, or other less durable metals. Glass and porcelain do not give off metallic flavors, but they require extra care to avoid chipping and breaking.

COFFEE URN



The coffee urn has an inside container made of glass or stainless steel which holds the coffee brew; an outside jacket holds both hot water to keep the coffee warm and filters of muslin, metal, or paper. Urns operate on gas, electric, or steam power.

The following procedure should be followed when operating the coffee urn:

1. Rinse the coffee urn thoroughly with hot water before using.
2. Fill urn with fresh, cold water and heat to boiling.
3. Place clean filter into urn basket or fit clean bag into urn. (Filters may be paper, cloth, perforated plates, or wire screens.)
4. Pour the correct amount of dry coffee into filtering device, spread evenly, and add water.
   a. If urn is not self-pouring, release a gallon of boiling water into a container and pour over dry coffee with a steady circular motion. Continue to add water until the correct amount is in the urn. Generally, the water level is determined by a water gauge.
   b. If urn is self-pouring, allow steam pressure to force hot water over dry coffee through a nozzle head, and watch water gauge to determine amount of water being added.
5. Hold temperature at 185° F. (85° C.) for amount of time required for coffee to brew.
6. Remove bag of grounds from the urn, dump the grounds immediately, wash bag thoroughly, and soak in cold water.
7. Release a gallon of coffee from the urn and pour back into top of urn, giving a mixing action to produce a unified blend.
8. Check temperature gauge again, and maintain a temperature of 185° F. (85° C.) until coffee is served.

The areas of the coffee urn which require special care in cleaning are faucets, glass gauges, urn bags, and metal filter baskets. The coffee urn should be cleaned immediately after each brewing. To clean the coffee urn:

1. Brush inside walls well using hot water. Rinse urn until hot water runs clean and clear. Rinse inside of cover.
2. Unscrew top of glass gauge, brush, and rinse.
3. Remove and clean cap at end of faucet; scrub pipe leading from center of urn. If faucet has no caps, take it apart. Scrub spigot and rinse thoroughly with hot water.
4. Place several gallons of fresh water in urn; leave cover slightly ajar.
5. Empty and rinse urn before using.

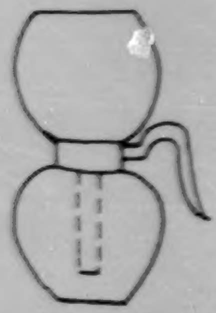
Twice a week, the urn should be cleaned more thoroughly by the following procedure:

1. Fill outer jacket 3/4 full of water and turn on heat; fill urn jar 3/4 full of water and add cleaner according to manufacturer's directions.
2. Clean gauge, faucet, pipes, plugs and other parts with a long thin brush and cleaner. Take faucet apart, clean well, rinse thoroughly, and reassemble.
3. Scrub and rinse inside of urn three or four times with hot water; continue until all traces of cleaning solution are removed.
4. Check spray heads to see that all holes are open; use stiff wire to open any clogged holes.
5. Leave a few gallons of fresh warm water in urn until next use. It is important that water is warm, since cold water may crack hot liner.
6. Empty urn and rinse before use.

Some pointers to keep in mind when cleaning filters, urn bags, and baskets are the following:

1. Rinse new bags or cloth filters with water at 140° F. (60° C.) to remove sizing.
2. Rinse in hot water after use. (Do not use soap, bleach, or detergent, as they affect the flavor of brewed coffee.)
3. Store in clean container of fresh, cold water when not in use to prevent urn bags or filter cloths from becoming rancid or picking up food odors.
4. Replace bags or filter cloths if undesirable odor persists.
5. Rinse urn basket after each use and clean thoroughly at end of day.
6. Scour with cleaner and stiff brush. Never use steel wool or abrasive.
7. Rinse urn basket thoroughly after cleaning.
8. Guard against pits, small nicks, and scratches which may catch dirt or coffee deposits.

VACUUM COFFEE MAKER



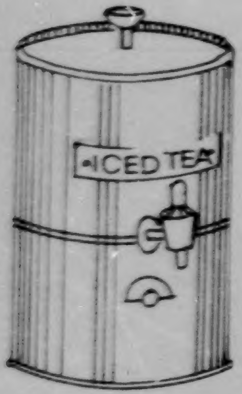
The vacuum coffee maker has a glass or metal upper bowl and a glass or metal lower bowl. The neck of the upper bowl fits through the opening of the lower bowl to form a tight seal. Vacuum coffee makers range in size from a single burner unit to a terraced unit with eight burners and decanters. The decanters hold 10 to 12 cups, or 1/2 gallon of coffee.

To operate the vacuum coffee maker, fill the lower bowl to the correct level with fresh cold water and place the coffee maker on heat. Rinse the clean filter cloth in cold water; place the cloth over filtering device in the top bowl. Pour the measured coffee into the top bowl. Place the top bowl firmly into lower bowl when the water begins to boil and twist the top part slightly. Allow water to be forced up into the top bowl. Stir the water in the top bowl for 30 seconds. Allow the water to contact coffee for 2 to 4 minutes. Reduce the heat to create a vacuum in bottom bowl. The vacuum pulls the brewed coffee down through the filter. When the brew has filtered back into the lower bowl, remove the upper bowl and the grounds. Set the brew over the heat to maintain a 185° F. (85° C.) temperature.

Clean vacuum coffee makers after each use. Use a brush to scrub all parts of the top and lower bowl. Rinse the bowls, filter parts and filter cloths thoroughly. Keep the filter cloth in cold water when the cloth is not in use. Twice a week soak all parts in a cleaner. Scrub and rinse the coffee maker well until all coffee deposits are removed. Clean the hot plates used for holding the pots with a damp cloth and dry them.

The proper cleaning of equipment is necessary to produce a cup of coffee of high quality. Deposits in the equipment ruin the flavor of the coffee. Some of these deposits are not visible, but they are in the form of a thin film of oil which can cause an "off-flavor" in the coffee. Proper cleaning supplies and equipment should be used, and cleaning should be done by an experienced employee.

TEA URN



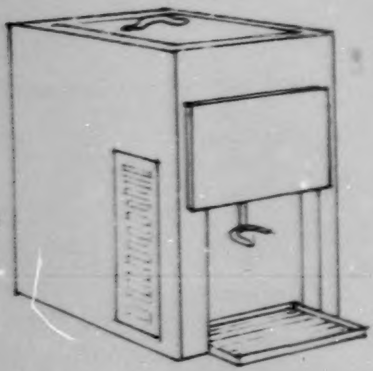
In dietary food service, tea is usually prepared in small tea pots. Use a clean china, porcelain, pottery, or stainless steel teapot when brewing tea. Avoid using metallic pots, as they give a metallic taste to the tea. Rinse the container with hot water to pre-heat the container before adding the tea.

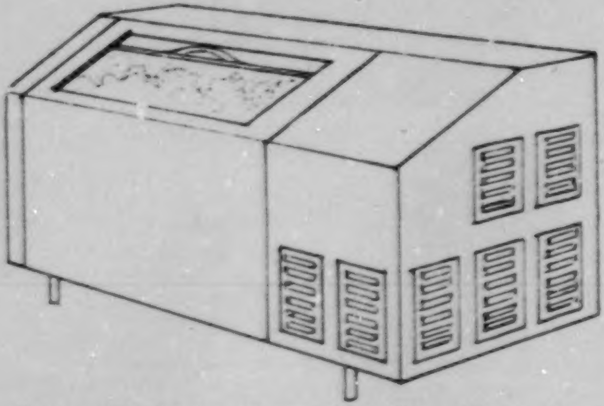
A tea-making machine is available now in many health care establishments. This machine combines powdered tea with freshly boiled water and dispenses fresh tea at the touch of a lever.

Clean the tea urn daily. Flush the empty urn with clear water. Scrub and wash all parts of the urn with hot water and a cleaner recommended by your training supervisor. Take the faucet apart, clean well, rinse thoroughly and reassemble. Clean the faucet each time the urn is cleaned because deposits which give the tea a bitter taste accumulate in the faucet. Rinse the urn with fresh water. Invert the tea urn and let it air-dry. Delime (clean by using a warm deliming solution) the tea urn once a week to remove any mineral deposits that may have accumulated.

ICE MAKING MACHINES

Ice is used in most health care establishments. Ice machines that make cubes, flaked ice, and cracked or chipped ice are available. Ice machines vary in sizes, producing from 100 to 5,000 pounds of ice per 24 hours. There are ice machines that produce individual portions for self-service operations. Some ice-making machines are combined with the water coolers and the soft drink dispenser units.





The exterior of the ice making machine should be cleaned daily with a damp cloth. Dry and polish the machine with a soft cloth. Periodically defrost the ice maker according to the manufacturer's directions. To clean the interior of the ice maker, wipe the inside with a cleaning solution. Rinse the interior with room temperature water and air-dry.

Use a scoop to remove ice from the bins of the ice-making machine. When the scoop is not in use, store it in a sanitary manner to protect it from water splashes, dust, and other contamination. Keep the lid to the bin closed for sanitary purposes and to prevent excessive changes in temperature. If a glass is broken in the ice used for beverages, melt the ice completely with hot water and drain the bin. Carefully examine the bin before placing fresh ice in the bin.

QUESTIONS:

Certain equipment and supplies are needed in cleaning a coffee urn. In Items 1-3, select the appropriate letter indicating the frequency of use for the equipment and supplies.

EQUIPMENT AND SUPPLIES	FREQUENCY OF USE
_______1. Cleaner	a. After each use
_______2. Brushes	b. Twice weekly
_______3. Hot water	c. Both a and b

Place an X in the blank by the letter of the phrase that best completes the sentence.

4. New coffee urn bags or cloth filters should be rinsed with water at 140° F. (60° C.) to
_____a. kill bacteria.
_____b. remove sizing.
_____c. make colorfast.

5. After using a cloth or bag filter in the coffee urn,
_____a. rinse the filter in hot water.
_____b. rinse the filter in strong bleach.
_____c. don't rinse the filter.

6. To prevent the bag or cloth filter from becoming rancid,
_____a. hang the filter on line in fresh air.
_____b. store the filter in clean container with fresh cold water.
_____c. soak the filter in water to which detergent has been added.

7. Urn bags or filters should be replaced
_____a. when they become stained.
_____b. after each use.
_____c. when undesirable odors persist.

8. The urn basket should be cleaned at the end of the day with
_____a. an urn cleaner and a stiff brush.
_____b. steel wool.
_____c. an abrasive cleaner.

9. The vacuum coffee maker should be cleaned after each use with
_____a. bleach and hot water.
_____b. an abrasive cleaner and a brush.
_____c. a brush and hot water.

10. The vacuum coffee maker needs to be cleaned twice weekly by
_____a. soaking all parts in a cleaner.
_____b. scrubbing all parts with steel wool.
_____c. soaking all parts in a strong bleach.

11. The coffee urn should be filled with
_____a. hot tap water.
_____b. fresh, cold water.
_____c. distilled water.

12. Used coffee grounds should be
_____a. dumped immediately after the coffee is brewed.
_____b. set aside for second use.
_____c. left in the urn until it is ready to clean.

13. Drawing or releasing a gallon of the brewed coffee and pouring it back into the urn is done to
_____a. cool off the brewed coffee.
_____b. improve the flavor by adding air.
_____c. improve the flavor by giving the coffee a unified blend.

14. Filter cloths for coffee makers should be rinsed in
_____a. detergent and bleach.
_____b. cold water.
_____c. a strong soda solution.

15. Filter cloths are placed over the filtering device in
_____a. the lower bowl of the vacuum coffee maker.
_____b. both bowls of the vacuum coffee maker.
_____c. the top bowl of the vacuum coffee maker.

16. When the top bowl is placed on the lower bowl of the vacuum coffee maker, the water in lower bowl should be
_____a. boiling.
_____b. hot.
_____c. cold.

17. Water is forced from the lower bowl up into the top bowl by
_____a. heat.
_____b. cold.
_____c. gravity.

18. When the water has been in contact with the coffee for the correct length of time, one should
_____a. remove the filter.
_____b. increase the heat.
_____c. reduce the heat.

19. The brewed coffee will return to the lower bowl of the vacuum coffee maker because of the
_____a. density of the brew.
_____b. vacuum created in the lower bowl.
_____c. temperature in the lower bowl.

20. After the coffee returns to the lower bowl, the upper bowl should be
_____a. left in place.
_____b. removed.
_____c. twisted slightly to insure a tight fit.

21. Why is cleanliness of the coffee maker essential?

22. Why should you avoid using metallic pots when preparing tea?

23. Name three types of ice used in health care establishments.

a.
b.
c.

24. How should ice be removed from bins?

25. What should be done if a glass is broken in the ice bin?

ASSIGNMENT:

I. List the types of beverage equipment used at your training station. Outline the procedures used to prepare coffee and tea.

GROUP WORK:

I. Compare the beverage equipment used in your training station with equipment used by other dietetic aides.

II. View a film or watch a demonstration on brewing coffee, the procedures for making coffee, trouble spots, and equipment. Compare the procedures shown in the film or in the demonstration with the ones used at your training station.

UNIT V-4

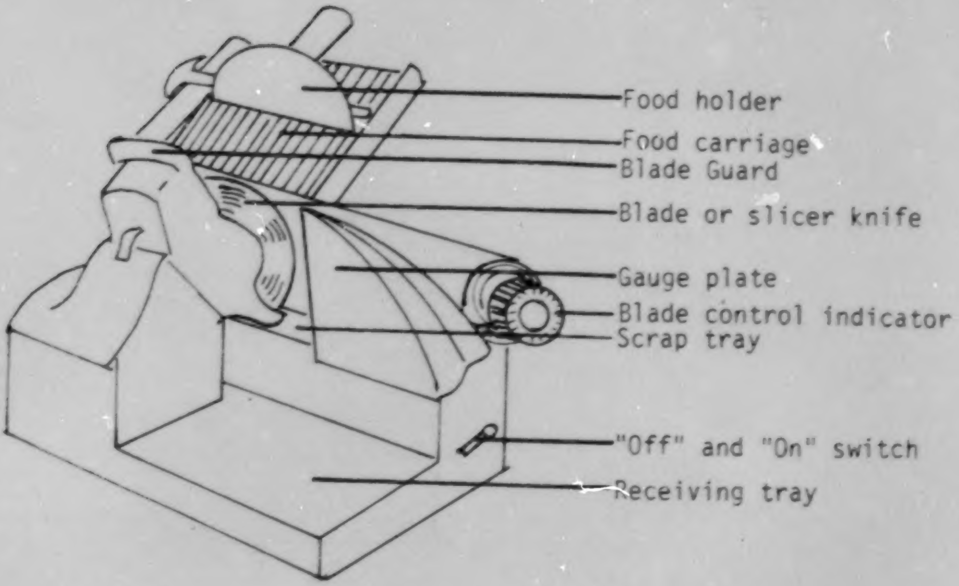
LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Food Cutting Equipment

TASK: 10. Select and correctly use proper piece of equipment for a specified job in food preparation and service.

OBJECTIVES: When you finish this lesson, you should be able to
a. identify parts of food cutting equipment
b. describe procedure for operation food cutting equipment
c. list safety precautions related to use of food cutting equipment.

FOOD SLICER


Food holder
Food carriage
Blade Guard
Blade or slicer knife
Gauge plate
Blade control indicator
Scrap tray
"Off" and "On" switch
Receiving tray

The food slicer is used for slicing meats and cheese. Fruits (apples, oranges, lemons, etc.), vegetables (tomatoes, cabbage, onions, celery, etc.) and bread may be sliced by the food slicer. The food slicer can be used for cutting hot or cold foods.

HOW TO OPERATE A FOOD SLICER

CAUTION: Instructions given below are general. Read and follow manufacturer's directions carefully.

WHAT TO DO	HOW TO DO IT
1. Put plug into socket.	1. Plug in. NOTE: Be sure cord is dry and free from grease to avoid short circuits. Be sure that hands are dry to prevent shock.
2. Adjust indicator.	2. Adjust blade control indicator for desired thickness of slice.
3. Place food in carriage.	3. Place food in the food carriage. Hold food firmly in place using food holder.
4. Start motor.	4. Turn switch on.
5. Slice food.	5. Using handle, move carriage back and forth across blade. NOTE: Develop a rhythmic motion; do not bang carriage.

Cautions and Guides In Operating A Food Slicer

The operation of a food slicer varies according to the make and model. Follow the manufacturer's instructions to obtain the best performance from the slicer and to assure the long life of the machine.

1. When cleaning a slicer, do not let water come in contact with the motor or electrical wiring.
2. Never use slicer when blade guard is off.
3. Always keep hands away from blade when machine is in operation.
4. Keep plug out of socket when machine is not in use. Be certain guard is on slicer before putting plug in socket.
5. Make certain hands are dry before operating slicer.
6. Always make certain switch is off and plug pulled out of socket before cleaning slicer.
7. When disconnecting slicer always pull the plug, never the cord.
8. Never use metal instrument to scrape off food particles from slicer knife, as nicked blade tears food.
9. Be sure cord is dry and free from grease.
10. Do not use very hot water or steam in cleaning slicer, as too much heat may dry lubricants in important parts.
11. Keep blades sharpened according to manufacturer's instructions.

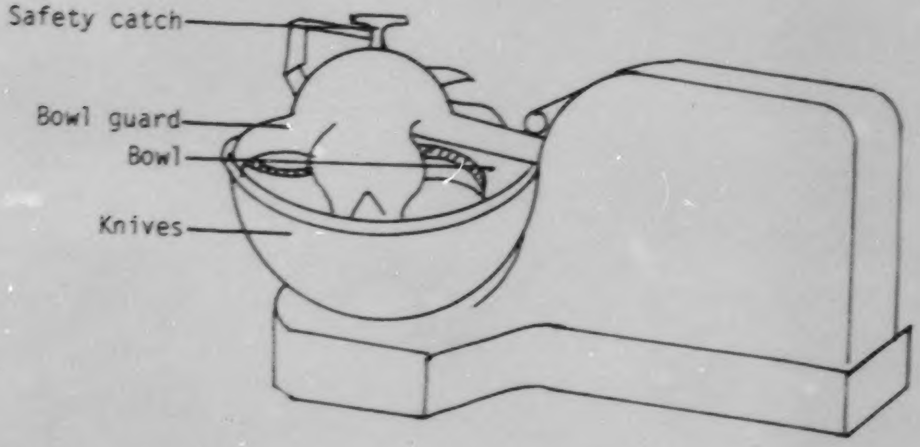
How To Clean A Food Slicer

CAUTION: Instructions given below are general. Read and follow manufacturer's directions carefully.

Daily Cleaning:

1. Remove electric cord from socket. Set blade control indicator at zero. Remove parts following manufacturer's instructions.
2. Wipe gauge plate with hot detergent solution. Rinse and dry. NOTE: Keep clear of blade edge. Wipe entire blade with heavy cloth, folded and dampened with hot detergent solution. Wrap cloth around long-handled hook, if provided. (Wipe from center toward edges of blade.) Rinse and dry blade with clean heavy cloth.
3. Wash blade guard in hot detergent solution. Rinse and dry. NOTE: Replace blade guard immediately to prevent injury.
4. Wash other parts in hot detergent solution. Rinse and dry.
5. Wash all surfaces with hot detergent solution. Clean under blade with damp cloth. (Push cloth under blade, using long-handled hook, if provided.) Rinse and dry. Clean area under slicer.
6. Replace parts following manufacturer's instructions.
7. Cover with plastic or clean towel.

FOOD CUTTER OR CHOPPER



HOW TO OPERATE A FOOD CUTTER OR CHOPPER*

CAUTION: These instructions are general. Read and follow manufacturer's directions carefully.

WHAT TO DO	HOW TO DO IT
1. Inspect Cutter.	1. See that machine is assembled completely with all parts securely in place. Where clamp nuts are used, see that they are turned to hold bowl guard in place.
2. Start motor.	2. Push "Start" button or move switch to "Start."
3. Fill bowl.	3. Feed food into bowl gradually. Never fill bowl over 2/3 full. Never use fingers to push food under blades. Moving in the direction opposite to bowl rotation, scrape food down with large spoon from outer edge toward bottom of bowl to insure uniform cutting.
4. Remove food.	4. Push "Stop" button or move switch to "Stop" position. Wait for knives to stop rotating. CAUTION: Knives will continue to rotate rapidly several seconds after machine is turned off. Throw safety catch. Remove food from exposed part of bowl. Raise guard and remove remaining food.

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*U.S. Department of Agriculture. Training Course Outline on the Use and Care of Equipment. Washington, D.C.: U.S. Government Printing Office, 1960. pp. 59-62.

WHAT TO DO	HOW TO DO IT
5. Prepare for next operation.	5. Hold knives to prevent rotation and wipe blades cautiously. Wipe out bowl. Rinse knife guard, dry, and replace. Tighten clamp nuts and levers for next operation. Leave safety catch in disengaged position.

SAFETY PRECAUTIONS

1. Never put hands in bowl when the cutter is in use.
2. Wait until knives have stopped revolving before removing food or cleaning.
3. Do not overload bowl; fill 2/3 full.
4. Use large spoon rather than hand to guide food into cutters; move spoon in direction opposite to bowl rotation.
5. Do not use cutter for cutting meat with bones or gristle; doing so damages knives and gears.
6. After cleaning cutter, make sure knives are replaced in the proper position.

How To Clean A Food Cutter Or Chopper

CAUTION: Instructions given below are general. Read and follow manufacturer's directions carefully.

DAILY CLEANING:

1. Push switch to "Off" position. DANGER: WAIT FOR KNIVES TO STOP REVOLVING. Release safety catch holding bowl guard in place. Lift guard and remove.

2. Unscrew wing nut and remove blades from motor shaft. Clean blades cautiously and carefully with hot detergent solution, using dish mop or sponge with handle. Rinse and dry.

3. Remove all food particles, paying particular attention to area around guard. Wash with hot detergent solution. Rinse and dry.

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*U.S. Department of Agriculture. Training Course Outline on the Use and Care of Equipment. Washington, D.C.: U.S. Government Printing Office, 1960. pp. 59-62.

4. If bowl is removable, remove and wash other parts. If bowl is fixed, wipe out food particles and clean with hot detergent solution. Rinse and dry.

5. Wash small parts in hot detergent solution. Rinse and dry.

6. Replace guard. Attach bowl to base. Attach knife blades to shaft. Drop guard into position.

7. If bowl is not removable, clean under surface. Wash table or pedestal with hot detergent solution. Rinse and dry.

QUESTIONS:

1. What two safety measures should be followed when plugging in the food slicer?
   a.
   b.

2. When the food slicer is not in use, it should be ______________________.

3. Where should the blade control indicator be set before parts of the food slicer are removed?

4. What kind of solution is used for cleaning the blade and other parts of the food slicer?

For each function listed, locate the part of the food slicer associated with it. Place the number corresponding to your choice in the blank to the left of each item. Use a number only once.

Function

_____5. Starts and stops the food slicer
_____6. Holds food while it is being sliced
_____7. Regulates thickness of the slice of food
_____8. Holds the scraps
_____9. Tells number of slices per pound
_____10. Holds the sliced food
_____11. Cuts the food
_____12. Provides safety when slicing food
_____13. Pushes food against blade

Part of Food Slicer

a. Blade control indicator
b. Blade guard
c. Blade or slicer knife
d. Food carriage
e. Food holder
f. Gauge plate
g. "On and Off" switch
h. Receiving tray
i. Scrap tray

14. When operating a food chopper, what two things should be checked before the motor is started?

    a.

    b.

15. a. How should food be fed into the food chopper?

    b. How full should the bowl be filled?

    c. What safety precaution should be observed when filling the bowl?

16. What can be done to insure uniform cutting when using the chopper?

17. Why would it be dangerous to remove food from chopper immediately after the "Stop" button is pushed?

18. What needs to be done to the chopper after the food is removed?

19. a. What should be used to guide food into the cutters of the chopper?

    b. In what direction should food be guided?

20. Why should meat with bones or gristle not be cut in the food chopper?

21. What are the steps in reassembling the food chopper after it has been cleaned?

    a.
    b.
    c.
    d.

ASSIGNMENT:

I. Refer to safety precautions to be observed when operating a food slicer. What procedures were violated in the following situation?

Mary was assigned to the job of cleaning the meat slicer. She checked to see that the switch was off and pulled the cord to unplug the slicer. She used very hot water to clean the frame of the slicer and was careful not to let the water come in contact with the motor. Some food particles were still on the slicer knife so she used a knife to remove them.

GROUP WORK:

I. Make posters to illustrate the safety precautions related to the use of food cutting equipment. Display the posters at your training station with your employer's permission.

UNIT V-5

LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE

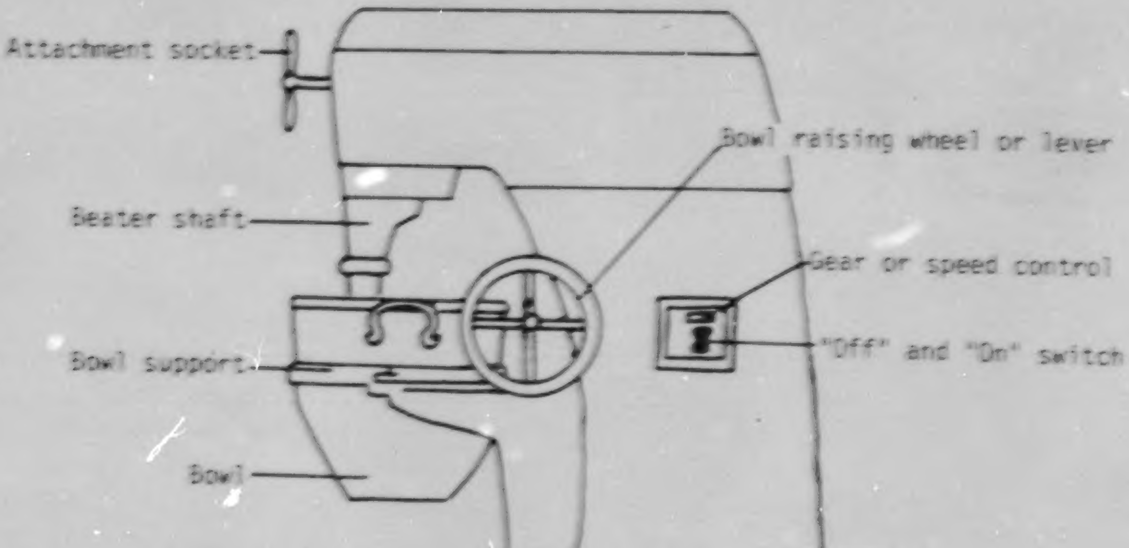
SUBJECT: Mixing Equipment

TASK: 10. Select and correctly use proper piece of equipment for a specified job in food preparation and service.

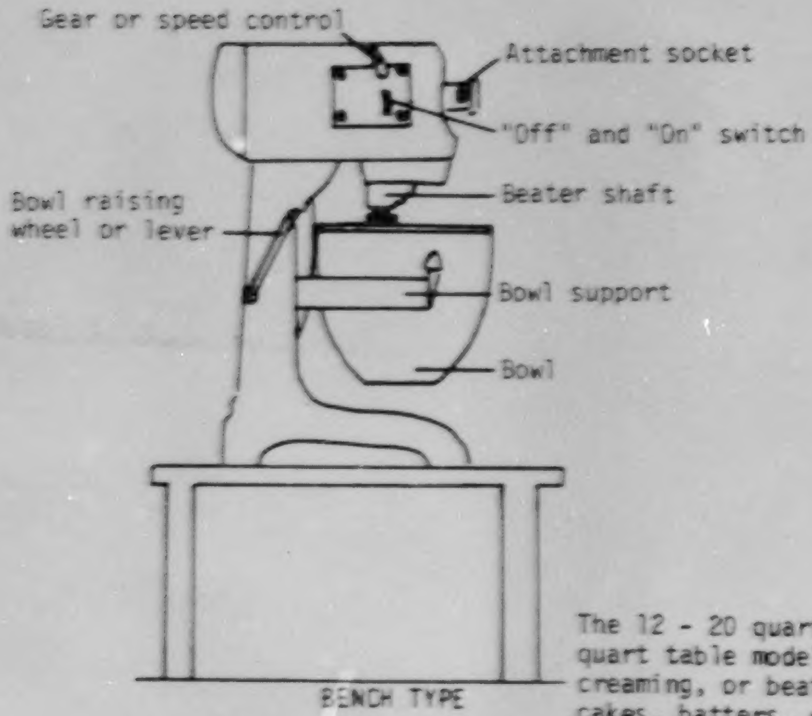
OBJECTIVES: When you finish this lesson, you should be able to
a. identify parts of a mixer and their functions
b. describe procedure for operation and care of a mixer
c. list safety precautions related to use of a mixer
d. identify parts of a blender
e. list techniques in caring for blender and safety precautions to observe.

MIXER

The 30 - 60 quart floor model mixer is used for mixing and blending ingredients or for incorporating air into the product.


Attachment socket
Bowl raising wheel or lever
Beater shaft
Gear or speed control
Bowl support
"Off" and "On" switch
Bowl

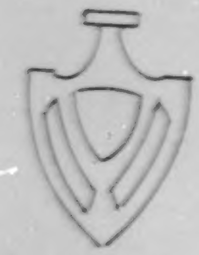
FLOOR TYPE


Gear or speed control
Attachment socket
"Off" and "On" switch
Beater shaft
Bowl raising wheel or lever
Bowl support
Bowl
BENCH TYPE

The 12 - 20 quart bench model and the 5 quart table model are used for mixing, creaming, or beating ingredients for cakes, batters, doughs, pastries, or meringues.

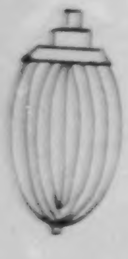
Uses for Beaters and Whips (Agitators)

Flat Beater--Use for general mixing, never use for heavy doughs.



1. Mixing main dish items such as ham-bean loaf, fish cakes, and hamburgers.
2. Mashing vegetables such as potatoes and squash.
3. Creaming mixtures such as butter and sugar, uncooked icings, honey butter, and sandwich spreads.
4. Mixing batters such as muffins, cakes and steamed puddings.
5. Blending mixtures such as pastry and biscuits.

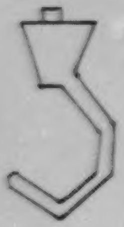
Wire Whip--Use for incorporating air into light mixtures; never use for heavy mixtures.



1. Blending dry mixes.
2. Whipping dry milk.
3. Reconstituting dry milk.
4. Beating egg whites.
5. Whipping cream.
6. Mixing light icings.

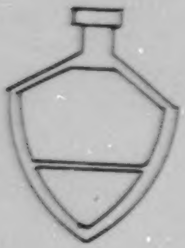
Dough Hook--Use for mixing heavy doughs requiring a folding and stretching action for best development.

1. Bread or rolls.
2. Biscuits.
3. Noodles.



Pastry Knife--Use for combining shortening and flour by a cutting action.

1. Biscuits.
2. Pie crust.
3. Shortcake.



Uses for Selected Attachments

Vegetable Hopper--The purpose of vegetable hopper cover is to force the food through the hopper. The rotor in the hopper turns to force the food through the plate. Do not add food while the rotor is in motion, as fingers might get caught in the hopper.

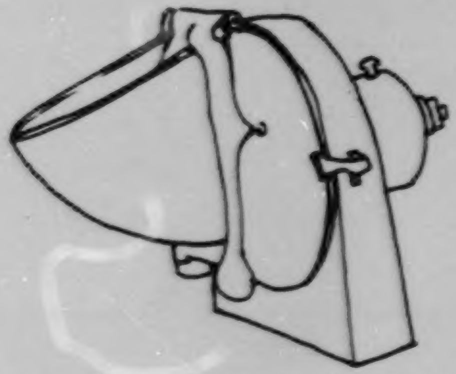
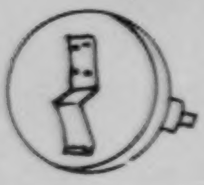


Plate attachments are available for use with the vegetable hopper.

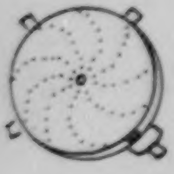
Slicer Plate

1. Slicing vegetables for salads and soups.
2. Slicing firm fruits, such as apples for salads.
3. Slicing other vegetables, such as potatoes for scalloping and cabbage for steaming.



HINT: Fasten a plastic bag to the machine to catch the food. The bag fills easily, stores easily in the refrigerator, reduces discoloration of vegetables, and keeps food moist.

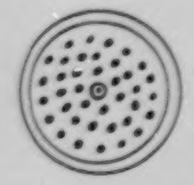
Grater Plate



1. Grating hard vegetables, such as carrots, parsnips, and turnips.
2. Grating dry bread for crumbs.
3. Grating hard cheese.

HINT: Use a stiff brush to clean the plates. Toast the bread to a golden brown before grating.

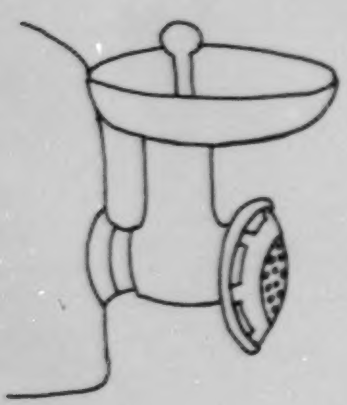
Shredder Plate



1. Shredding cabbage for coleslaw.
2. Shredding vegetables for soups and salads.

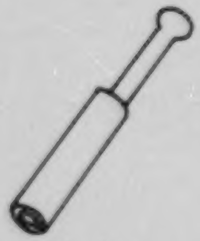
HINT: Shredding onions into a plastic bag reduces eye and nose irritation.

Meat and Food Chopper



1. Chopping or grinding raw or cooked meats.
2. Chopping vegetables and dry fruits.
3. Grinding dry bread crumbs.
4. Grating hard cheese.
5. Chopping hard-cooked eggs.

Use the pusher--never hands--to push the food through the chopper.



Pusher

HINT: Put a piece of bread through the chopper after grating cheese.

How To Operate A Mixer

1. Select appropriate size bowl and place on bowl support. Fill bowl with ingredients 1/2 to 2/3 capacity for best results.
2. Select proper agitator or attachment for desired use and insert onto beater shaft. Fit slot in agitator shaft over pin extending from hub and adjust until shaft is in the locked position.
3. Raise bowl to desired height by means of bowl raising lever. The agitator should not touch bowl.
4. Check to see if speed selector is on low speed and then start machine. Belt driven machine: Adjust speed control and switch to "On" position. Gear driven machine: Be sure gear is in neutral. Press start button and set gear to speed required by recipe. It is advisable to start at speed 1, then adjust to higher speeds if necessary. IMPORTANT: For gear driven machine, always put clutch lever into neutral before changing speeds.
5. Select speed desired and mix required length of time.
6. Stop machine.
   Belt driven machine: Switch to "Off" position.
   Gear driven machine: Shift to neutral gear and push "Stop" button.
7. Use bowl raising wheel or lever to lower bowl.
8. Remove beater by turning it around until pin on hub slips out of slot in beater shaft. Remove bowl.

How To Clean A Food Mixer*

CAUTION: Instructions given below are general. Read and follow the manufacturer's directions carefully.

Daily Cleaning:

1. Immediately after use, clean bowl support, beater shaft, shell, and base with hot detergent solution. Rinse and dry with clean paper towels. Scrape and brush out groove on beater shaft if necessary.

2. Wash bowl and beaters immediately after using (if egg mixtures or flour batters have been used, apply cold water before washing with hot water). Rinse and dry beaters thoroughly and hang up to prevent bending. Rinse and dry bowls thoroughly to prevent rusting.

Weekly Cleaning:
(to supplement daily cleaning.)

1. Clean thoroughly following instructions for daily cleaning.

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*U.S. Department of Agriculture. Training Course Outline on Use and Care of Equipment. Washington, D.C.: U.S. Government Printing Office, 1960. p. 77.

Safety Practices For Use Of The Mixer

1. Select the correct bowl for the type of mixture and then select the correct beater or whip according to the bowl size and mixture.
2. Be sure to fasten the bowl and beater or whip securely before starting the motor.
3. Prevent spillage by starting the machine in low speed.
4. Do not put hands or spoons into the bowl while the mixer is in operation.
5. Always use a rubber scraper, flexible spatula, or long-handled spoon to scrape down the sides of the bowl and to remove food from beater or whip.
6. Scrape down the sides of the bowl after the agitator has stopped.
7. Use mixing bowls for mixing only--do not put them on the range or in the oven.
8. If the mixer is used on a continuous basis, always allow time for the motor to cool. Most mixers operate at a capacity load for one hour without overheating or damaging the motor.
9. Remove agitators and attachments only when the motor has stopped.
10. Use bowls large enough to hold the food to be mixed without danger of it slopping over onto the floor.
11. Use a splash cover if bowls are filled over half full.
12. Do not use a container too heavy for you to handle safely by yourself unless wheeled equipment is available for moving the bowl and materials.
13. Should an overload occur, stop the machine and correct the condition before continuing with the job.
14. Be sure small utensils are not dropped into the bowl.
15. Do not wear loose clothing that may catch in the moving parts of the machine.

BLENDER

Blenders are used for high-speed blending, pulping, mixing, or reducing of animal tissue, vegetables, or fruits.

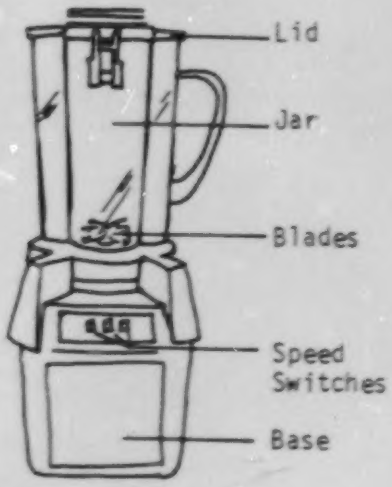
Operation

1. Place jar on base (or assembly unit). Follow manufacturer's instructions in securing jar on base.

2. Place substances to be blended into jar.

3. Place lid on jar making sure lid is secured.

4. Connect cord.



5. Turn on switch and select desired speed for substances to be blended (see manufacturer's instructions).

   NOTE: Speed may be changed without stopping machine.

6. Turn switch off as soon as ingredients reach the desired firmness or thickness. Ingredients are reduced to a similar mass almost immediately.

How To Clean A Blender

1. Remove jar from base. Wash and rinse using regular hand dishwashing procedure. Dry.
2. Wipe base with damp cloth after each use. Polish with dry cloth.
3. See manufacturer's instructions for further care, such as oiling.

Safety Practices for Use of The Blender

1. Do not drop spoons, spatulas, or scrapers into machine while motor is on.
2. Be sure lid is fastened tightly.
3. Do not put very coarse foods or large pieces of ice in jar.
4. Disconnect cord when machine is not in use.

QUESTIONS:

For each function listed, locate the part of the mixer associated with it. Place the letter corresponding to your choice in the blank to the left of each function. Use a letter only once.

	Function	Part of Mixer
_____1.	Point where attachment is put on mixer	a. Attachment socket
		b. Beater shaft
_____2.	Part that raises or lowers the bowl	c. Bowl
		d. Bowl support
_____3.	Container to hold food	e. Bowl raising wheel or lever
_____4.	Point at which beater is attached	f. Gear or speed control
		g. "Off and On" switch
_____5.	Part that starts and stops the mixer	
_____6.	Part that adjusts speed of the mixer	
_____7.	Part that holds the bowl	

For each task listed, locate the agitator associated with it. Place the letter corresponding to your choice in the blank to the left of each task. The letters may be used more than once.

Task

_____8. General mixing
_____9. Beating air into light mixtures
____10. Mixing heavy doughs
____11. Combining shortening and flour by a cutting action
____12. Mixing prune cake
____13. Making crust for apple pie
____14. Whipping 7-minute icing
____15. Mixing cinnamon rolls
____16. Making meringue for lemon pie
____17. Mixing biscuits
____18. Mashing squash

Agitator

a. Dough hook
b. Flat beater
c. Pastry knife
d. Wire whip

19. What is the blender used for?

20. List four safety precautions that should be observed when using the blender?

a.

b.

c.

d.

ASSIGNMENT:

I. Examine instruction booklets for information on the use and care of mixing equipment. What safety procedures are stressed in the instructions?

GROUP WORK:

I. With other dietetic aides, visit a bakery or other food service establishment and watch a demonstration on the use and care of mixing equipment.

UNIT V-6

LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE

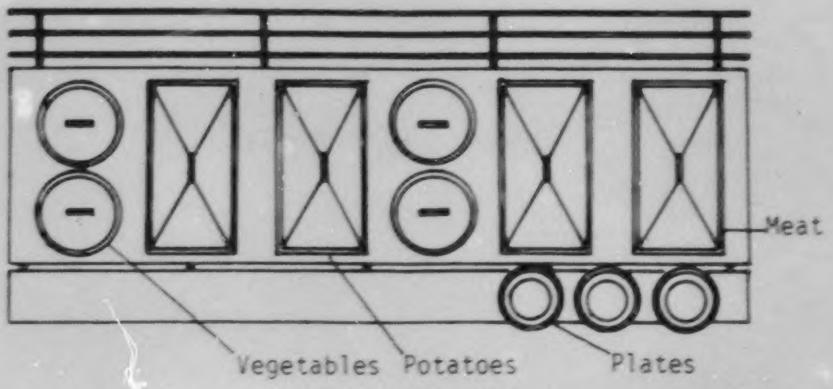
SUBJECT: Holding and Serving Equipment

TASK: 10. Select and correctly use proper piece of equipment for a specified job in food preparation and service.

OBJECTIVES: When you finish this lesson, you should be able to
a. identify holding and serving equipment and their functions
b. describe procedures for the use and care of holding and serving equipment.

STEAM TABLE

Steam tables are used to keep foods hot and ready for immediate service. Arrange the food on the steam table in the order in which it will be placed on the plate. (See illustration for proper arrangement). Proper arrangement aids in serving food rapidly.



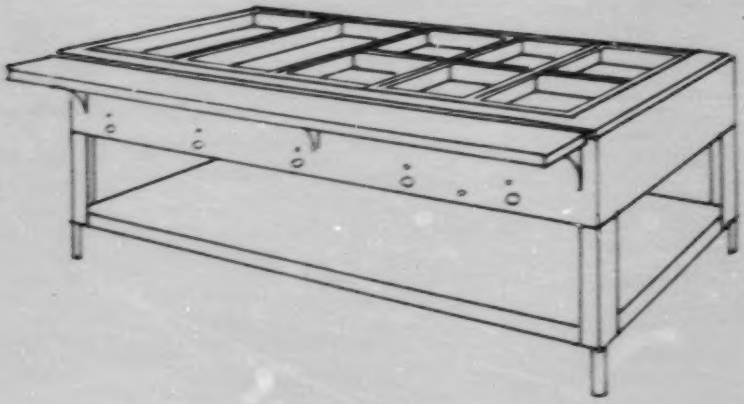
If the steam table is to be operated at maximum efficiency, certain principles should be remembered:

1. Water in the steam table tank should be kept at a temperature which will hold the food throughout at a minimum temperature of 140° F. (60° C.) throughout the serving period. Under these conditions, the temperature of the steam table acts as a control over germs. If the temperature drops too low, however, the steam table affords ideal conditions for germs to grow: moisture, warmth, and food.
2. Water should be held at the proper temperature and not allowed to increase. If water boils or gives off excessive amounts of steam, foods become over-cooked and dry.
3. Containers should be covered when placed on the steam table; and they should remain covered until time to serve.
4. The water pan should be filled with hot tap water to save time and fuel.

Effective cleaning removes soil from equipment. It is important not only to be aware of proper cleaning procedures, but also to know the "when" of cleaning. In applying the principles of sanitation, the time factor cannot be overemphasized. Cleaning immediately after use reduces the length of time during which bacterial growth may occur, and it also requires less time and energy. Keep in mind, therefore, that if the steam table is to be cared for properly, food particles should be removed promptly after service is completed.

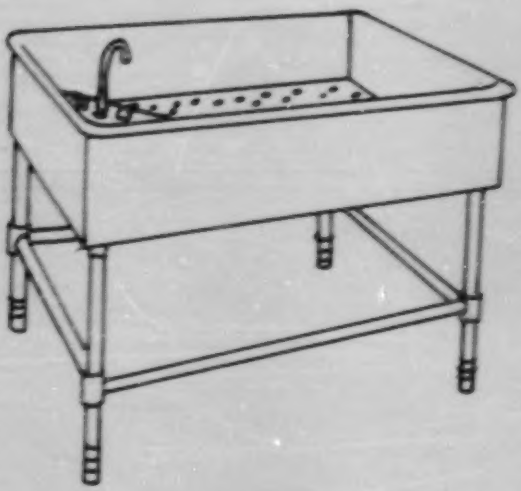
To clean steam table containers scrape and pre-rinse to remove excess soil. Be sure to clean covers as well as containers. Wash, using hot (120° F. or 48.8° C.) water, detergent, stiff brush, and "elbow grease." Rinse in hot (140° F. or 60° C.) water. If necessary, sanitize the steam table containers by using hot (170° F. to 180° F. or 76.6° C. to 82.2° C.) water. Air-dry steam table containers. This is the most effective method because of the bacteria which is often on the drying towels. Drain and clean the water pan of the steam table often to prevent scale build-up. A periodic use of a mild acid such as vinegar can be used to remove scale from water. This treatment should be done when the table can be aired after a thorough rinsing to prevent the smell of vinegar the next time the table is used.

WATERLESS FOOD WARMER



The waterless food warmer allows different foods to be kept at proper storage temperatures, preserves the range-fresh flavor, and eliminates the waste of food. The storage temperatures required for different foods (meats, 145° to 150° F. or 62.7° to 65.6° C; vegetables, 140° F. or 60° C.; thin soups, 180° F. or 82.2° C.; etc.) are maintained on the waterless food warmer by control valves and thermostats. The fully insulated compartments are separately heated, and there is no water pan. Some models of the waterless food warmer have removable spillage pans which speed cleanup time and improve sanitation.

BAIN-MARIE



The primary purpose of the bain-marie is to keep food hot at the service counter. It is not to be used for cooking or for continuing the cooking process. Foods which may be kept hot in a bain-marie are sauces, gravies, soups, and vegetables. Food containers should be kept covered and they should be deep enough to keep the water level from rising and spilling into the food.

During operation, a pipe is inserted into the water drain which is located in the center of the bain-marie floor. The bain-marie is filled with water to keep the containers hot. The water must not cause the containers to float, or spill into the food containers.

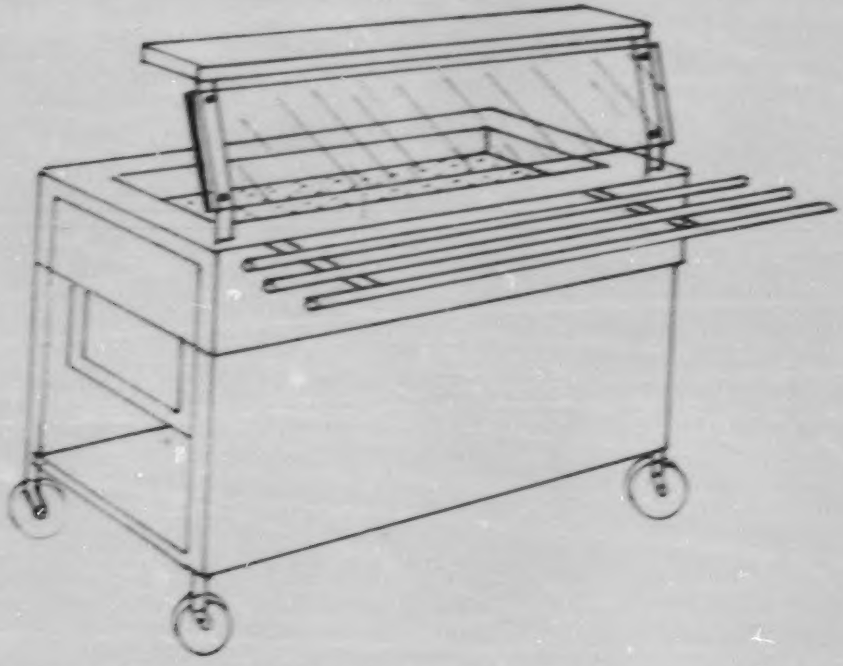
To insure correct temperature of the bain-marie, add the water and turn the controls on before serving time. As you turn the water on, set the steam switch at the "On" position. The steam switch to the hot wells should also be in the "On" position.

Take extra precautions to prevent burns while placing or removing the food containers in the bain-marie. Also take precautions when removing the pipe from the water drain.

Turn the steam switch to the "Off" position when the bain-marie is not in use. Drain the water from the bain-marie at the end of each serving period by lifting the pipe from the water drain.

Remove and thoroughly clean the metal bottom of the basin after use. If corrosion gathers on the bain-marie, remove the corrosion with suitable chemicals.

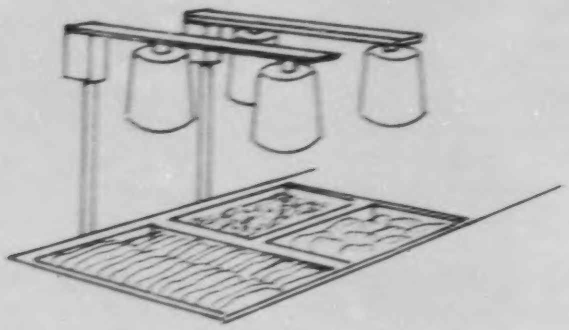
COLD FOOD SERVER



The cold food server is usually made of stainless steel and is sometimes called an ice bain-marie. It may be either stationary or portable. The purpose of this server is to keep cold food chilled. Before serving time the perforated inner liner is filled with crushed ice. The cold food is placed on this bed of crushed ice. As the ice melts, the water drips into the lower container.

The cold food server must be cleaned completely each day. Water is removed by means of a drain in the bottom and is carried away through a drain pipe. The ice is removed, and the entire cold food server is washed with a detergent solution and a clean cloth. The perforated metal liner is easily removed for complete cleaning. The health care establishment has its own recommendation for a sanitizing product to use. The entire food server should then be completely rinsed and wiped dry. The cleaning of the cold food server may be the responsibility of the dietetic aide.

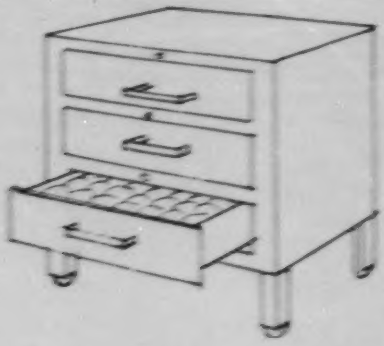
INFRARED LAMPS



Infrared lamps are used to keep foods warm. They are used on food displayed in a cafeteria or a buffet counter. The lamps are also used to keep food warm before the food is served from the kitchen.

The lamps are available in various metals and may be a pull-down type or a stationary stem mounting. Let lamps cool before cleaning. Wash with a cloth and a mild detergent and water solution. Rinse and wipe dry with a soft cloth.

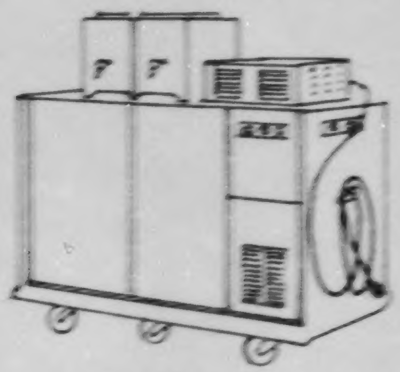
ROLL WARMER



The roll warmer is used for keeping a large quantity of breads and sweet rolls warm. The warmer has separate drawer compartments with individual controls for each drawer. The roll warmer keeps bread from drying out and is an efficient method for holding hot breads prepared in advance.

After the unit cools, remove crumbs from compartment drawers. Wash the drawer with a soft cloth and a mild detergent and water solution. Rinse and wipe dry with a soft cloth.

HOT AND COLD CARTS



These carts usually have a 20-tray capacity and are usually used for tray delivery. They are enclosed carts with one side refrigerated and the other side heated. Trays with cold foods on them are placed in the refrigerated side; hot foods and cups for hot beverages are set in a drawer on a small tray in the hot side. Insultated jugs of coffee and tea may be set on top of the cart. Some models have beverage dispensers.

Another hot-cold cart uses divided trays, one section for cold foods and the other for hot. Rubber gaskets in the cart separate the two sections as the tray slides in. Trays are completed in the kitchen; no matching is needed at the service area, so possibility of error is reduced. Clean the carts daily. Brush off all loose soil. Be sure to clean out the corners of the carts. Wipe off the interior and the exterior of the cart with a damp cloth. Rinse and wipe dry with a clean cloth.

Water spots or a dull lime haze may appear on stainless steel carts. To remove the water spots or lime haze, apply a cleaning solution recommended by the manufacturer. Let the solution soak until the spots or haze disappear. Rinse with clear water and dry with a clean cloth.

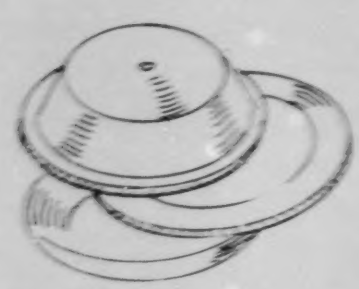
THERMAL DISH TRAYS OR PLATE HOLDERS*

Metal dishes are heated in an oven and slid into a depression in a tray or plate holder. Mobile and self-leveling heaters for disks are available. The plate is set on the warming disk, then covered for delivery. Insulated individual containers are used for hot soups or beverages or iced desserts. The trays are complete when they leave the kitchen.

THERMAL TRAY SYSTEM*

Hot or cold foods are portioned into special containers which are then set into compartmental trays. Filled trays are stacked one on top of another to form a vertical hot column and a vertical cold column, using the temperatures of the foods themselves to maintain temperatures during delivery. A cover is placed over the top tray.

COMPOSITION PLATE HOLDER AND DOME COVER*



Composition plate holders and dome covers are used with tray delivery equipment. The plate holder and dome cover lock together to retain the temperature of food on heated plates. Insulated covered containers are needed for other hot foods. Chilled dishes are needed for cold foods.

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*U.S. Department of Health, Education, and Welfare. A Guide to Nutrition and Food Service. Washington, D.C.: U.S. Government Printing Office, 1971. p. 101

QUESTIONS:

Place an X in the blank by the letter of the phrase which correctly completes the statement.

1. Food should be arranged on the steam table according to the
   _____a. color combinations.
   _____b. order in which it will be placed on plate.
   _____c. order in which it will be eaten.

2. Water in the steam table should be kept at
   _____a. 140° F. (60° C.).
   _____b. boiling point.
   _____c. a temperature to hold food at 140° F. (60° C.).

3. In order to prevent bacterial growth, the steam table should be cleaned
   _____a. immediately after the service is completed.
   _____b. after it has cooled.
   _____c. the same day it is used.

4. A steam table may be sanitized by using water at
   _____a. 120° F. (49° C.).
   _____b. 170° - 180° F. (77° - 82° C.).
   _____c. 140° F. (60° C.).

5. List three functions of the waterless food warmer.

   a.

   b.

   c.

Place an X in the blank to indicate whether the statement is True or False.

6. The bain-marie is used to cook foods.
   _____a. True
   _____b. False

7. The water level in the bain-marie should be lower than the food containers so that they do not float.
   _____a. True
   _____b. False

8. Steam switches on the bain-marie should be turned to "On" while the water is running.
   _____a. True
   _____b. False

9. Water should be drained from the bain-marie at the end of each day.
_____a. True
_____b. False

10. Extra care must be taken to prevent burns when placing or removing the food containers in the bain-marie.
_____a. True
_____b. False

Fill in the blanks in each sentence with the best word to complete the items.

11. The cold food server keeps the food chilled by the use of ______________.

12. The cold food server is cleaned daily with a ________________ solution.

For each function listed, locate the holding and serving equipment associated with it. Place the letter corresponding to your choice in the blank to the left of each function. Use each letter only once.

Function

_____13. Filled trays are stacked in vertical hot and cold columns
_____14. Keeps large quantities of breads and sweet rolls warm
_____15. Insulated individual containers used for hot soups, beverages or iced drinks
_____16. Contains refrigerated and heated compartments for trays used in tray delivery
_____17. Lock together to retain temperature of food on heated plate
_____18. Keeps food warm that is displayed in a cafeteria or on a buffet counter

Holding and Serving Equipment

a. Composition plate holder and dome cover
b. Hot and cold carts
c. Infrared lamps
d. Roll warmer
e. Thermal dish trays or plate holders
f. Thermal-tray system

ASSIGNMENT:

1. Prepare a chart on the pieces of holding and serving equipment used at your training station showing their uses and the care required by each piece.

GROUP WORK:

1. With other dietetic aides, discuss the charts on the pieces of holding and serving equipment. Check to see if improvement can be made in your duties when using and caring for the holding and serving equipment.

UNIT VI-1

LARGE EQUIPMENT FOR COOKING FOOD

SUBJECT: Toasters

TASK: 11. Select and correctly use proper piece of equipment for cooking food.

OBJECTIVES: When you finish this lesson, you should be able to
a. describe procedures for using and caring for toasters
b. sumarize functions of toasters.

INDIVIDUAL TOASTER

Parts of the Toaster

The small electric toaster is a commonly used electrical appliance in health care establishments. The essential parts of the toaster include:

1. a heating element, which is insulated within a frame.
2. an appliance cord, which carries the current from the convenience outlet to the appliance.

Toasters vary in convenience features, such as removable crumb trays, toast ejectors, and regulators for degree of brownness.

Cleaning Procedures

Keep the toaster clean by wiping off the outside with a soft, damp cloth. If the toaster is greasy, use a non-abrasive cleaning compound. The cleaning compound and water should not touch the electrical element. Clean the crumb tray daily, observing the safety precautions listed below.

Safety Precautions

1. Always disconnect the cord when cleaning the toaster.

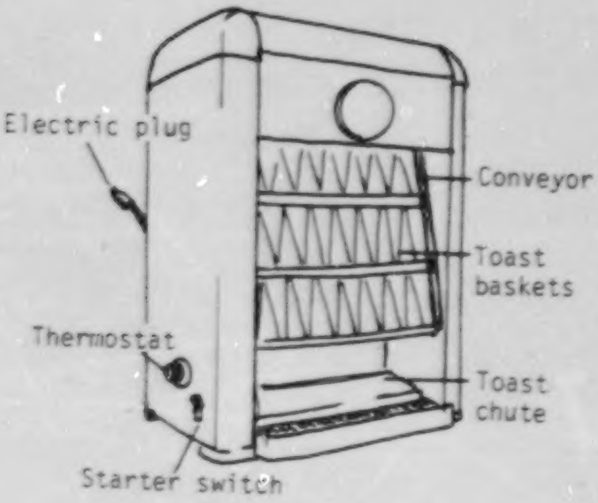
2. If a piece of bread becomes lodged inside, always disconnect the cord before attempting to remove the bread.

3. Be sure your hands are dry when operating the toaster.

CONVEYOR TOASTER

Conveyor toasters are used for toasting large amounts (approximately one loaf) of bread at a time. Following are instructions for the safe operation and care of toasters:

1. Set starter switch at "Off."
2. Plug in electric plug.
3. Turn starter switch on and off to be sure conveyor runs smoothly.
4. Set thermostat dial at 7.
5. Preheat for 20 minutes.
6. Test run a few slices of bread.
7. Adjust thermostat dial as needed.
8. Place bread in toast baskets.



How To Clean A Toaster

Daily Cleaning:

1. Wipe outside.
2. Remove crumbs.
3. Remove toast chute and clean base.

Monthly Cleaning:

1. Use non-abrasive cleaning compound on outside.
2. Boil baskets.

Safety Practices For Use Of The Toaster

1. Keep fingers clear of electrical elements as toaster is loaded.
2. Remove plug from electrical outlet when toaster is not in use.

QUESTIONS:

Place an X in the blank by the phrase which correctly completes each statement below.

1. An essential part of the individual toaster is
    _____a. the heating element which is insulated in a frame.
    _____b. a series of transistors.
    _____c. an extension cord.

161

2. Convenience features of individual toasters include
   _____a. regulators for degree of brownness.
   _____b. removable crumb trays.
   _____c. toast ejectors.
   _____d. all of these.

3. Individual toasters should be kept clean by wiping off the outside with
   _____a. a soft, damp cloth.
   _____b. a soft, dry cloth.
   _____c. a soft, sudsy cloth.

4. If the individual toaster is greasy, clean it with
   _____a. a steel wool pad.
   _____b. a non-abrasive cleaner.
   _____c. a scouring powder.

5. When cleaning the individual toaster, the cleaning compound or water should not touch the
   _____a. regulator.
   _____b. crumb tray.
   _____c. electrical element.

6. When cleaning or working with the individual toaster, always
   _____a. be sure it is turned off.
   _____b. check the regulator.
   _____c. disconnect it.

7. When operating the individual toaster, be sure hands are
   _____a. dry.
   _____b. wet.
   _____c. oiled.

8. What daily cleaning should be given to the conveyor toaster?

9. What kind of cleaning compound should be used on the outside of the conveyor toaster for monthly cleaning?

10. Give two safety precautions to observe when using a conveyor toaster.

    a.

    b.

ASSIGNMENT:

I. Name the type of toaster used at your training station. List the procedure you follow in operating and caring for the toaster.

GROUP WORK:

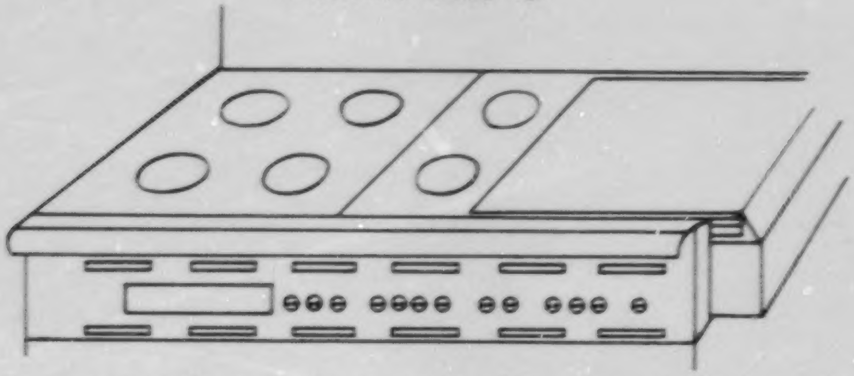
I. With other dietetic aides compare the procedure for operating and caring for the toaster at your training station.

UNIT VI-2

LARGE EQUIPMENT FOR COOKING FOOD

SUBJECT:	Surface Cooking Equipment
TASK:	11. Select and correctly use proper piece of equipment for cooking food.
OBJECTIVES:	When you finish this lesson, you should be able to a. summarize functions of the exhaust hood b. list techniques of caring for the exhaust hood c. describe procedures for use and care of the grill d. explain procedures for use and care of broilers.

ELECTRIC RANGE TOP

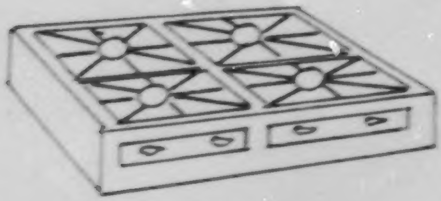


The electric range may have either a solid plate top or coil top cooking surface. Because the solid top plate model requires a preheat period, the heat control should be turned on at the beginning of the food preparation. Instant heat is produced on many of the fast-cycling electric coil units, and a preheat period is unnecessary.

Electric range top units may be set at high, medium, or low. Use high only until the food starts to cook, then turn to medium or low. "Low" produces 1/4 and "medium" 1/2 as much heat as "high." If the electric range has a thermostatic control, turn the switch to the exact setting for the temperature desired. The thermostatic control is an automatic device for regulating the temperature of the gas or electricity supply.

When turning on the heat controls, adjust only those for the portion of the range top to be used. Arrange pots on a solid top model so that they cover as much of the heated surface as possible. Pots on round units should cover the entire unit to make the best use of heat and to insure that the food cooks evenly. This procedure saves electricity and helps keep the kitchen cooler. Be sure to turn the units off when the cooked food is removed from the range top. Cover pots and pans when steaming foods to help prevent burning by retaining moisture in the pan and to reduce cooking time.

GAS RANGE TOP



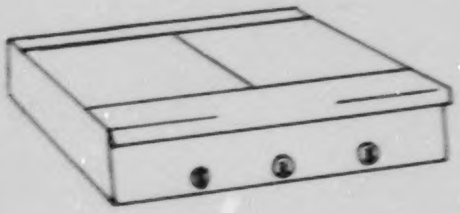
The gas range may have solid burners, open burners, or ring top cooking surfaces. The gas range should contain a pilot light and an automatic cutoff in case the pilot light fails to come on. Some gas ranges produce instant heat but the solid top requires a preheating period.

On gas ranges equipped with a pilot light lift the top cover to see if the pilot light is on. If it is necessary to relight the pilot light, depress and hold down the spring-type button and apply a match to the pilot opening. After waiting thirty seconds, release the button. The pilot light should stay lit. If the pilot light goes out, wait five minutes and repeat the process. Turn the burner valve on gently. On ranges without pilots, light the match before turning on the burner valve.

Use a low flame for simmering and a high flame for boiling. After the boiling point is reached, turn the flame down to save fuel. Turn off all gas controls when food is removed from the range top.

If open burners are used, pots should cover entire unit to make the best use of fuel and to cook the food evenly. When solid top burners are used, pots should be arranged to cover as much of the heated surface as possible.

HOT TOP RANGE

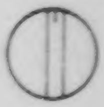


The hot top is used for cooking on top of the stove. It is not practical for heating large containers because it takes too long. Nor is it practical for heating milk, because the milk usually scorches. Any spilled or burned food should be scraped off immediately.

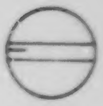
The hot top range heats evenly by a double bar burner. A simmer-set valve is located on the hot top. The surface cooking plate is removable for cleaning.

Each burner has a control knob which is located at the front. There is also a pilot light for each burner.

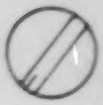
The burner is off when the pointer of the knob is in the 12 o'clock position.



For a high flame, the knob is turned counter-clockwise until it reaches the 9 o'clock position.



For a low flame, the pointer is turned down to about a 7 o'clock position.



Procedures for Cleaning a Range

Clean the range daily for efficient and sanitary operation. Turn the range off and let it cool before cleaning. Clean solid tops and round units with a wire brush or scraper. Wipe tops and units with a solution of hot water and detergent; rinse and dry. You may use cleaning powder to remove rust or spilled food. Remove and scrub drip trays with hot detergent solution; rinse and dry. Clean the sides and base of the range with the same solution. Wipe up immediately any food that has boiled over or spilled. Keep grease cleaned out of cracks or drip trays because spilled grease may become a fire hazard.

Weekly care includes soaking burners in hot detergent solution. Clean the clogged burners on the gas range with a stiff wire brush or an ice pick; then rinse and dry the burners.

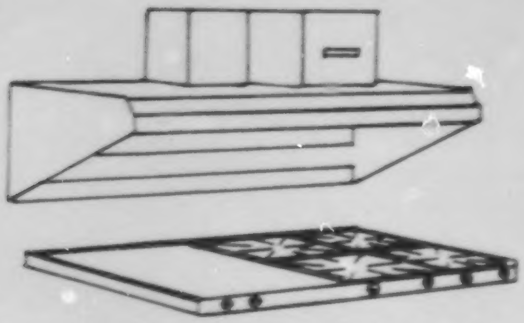
Unpainted parts of the range can be made rustproof by wiping them with a cloth dampened with cooking oil or other rust preventatives. This precaution is unnecessary for stainless steel surfaces.

It is important to let the range cool before cleaning. Do not pour water on top to cool or wash the range. Do not allow water to come in direct contact with wiring or electric switches.

Safety When Using The Range

1. Be sure there is good lighting in the working area for safe operation of the range.
2. Be sure ventilation is adequate.
3. For safety of workers, let the range cool before cleaning.
4. Never allow grease to accumulate in cracks of range or on drip trays because of the fire hazard; accumulated grease also causes unpleasant odors and attracts roaches and mice.
5. Avoid unnecessary spillage on the range top; if spillage occurs, clean the range top immediately. (A yellow flame is usually an indication of dirty burners).
6. To prevent burns in removing food from the range, use dry pot holders and make certain that space is available for placing the hot pots removed.
7. To prevent burns when removing lids from pots, use dry pot holders and lift lids away from you so that steam does not scald hands, arms, or face.
8. To prevent burns, do not allow a pot handle to protrude beyond the edge of the range.

EXHAUST HOOD

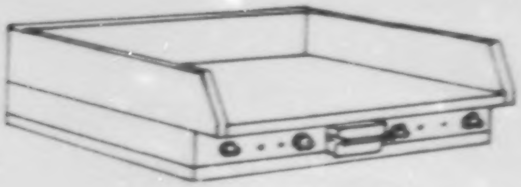


An exhaust hood should be placed above all cooking equipment for ventilation, fire control, and the removal of smoke, cooking vapors, and other odors from cooking areas.

Clean the exhaust hood periodically by using a cloth and a warm water detergent solution to remove the grease film. Rinse the hood with clean water and dry it with a clean cloth.

Wash the grease filters in the exhaust hood weekly. Remove the filters and wash by hand or in the dish machine. Remove the filter and wipe the surfaces with a damp cloth. Treat aluminum surfaces with general equipment cleaner. To treat surfaces which are not aluminum, apply an alkaline product solution to the surface with a brush or cloth. Filters should soak in the solution 15 to 30 minutes. Rinse filters with warm water and air-dry.

GRILL



A grill may be a separate piece of equipment or it may be part of a range top. The grill may be either gas or electric.

The surface of the grill must be seasoned before use. Seasoning is the build-up of shortening on the grill until a slick surface is formed. A new grill must be seasoned when it arrives in the kitchen, and it must be reseasoned after each thorough cleaning.

To season a grill, bring the heat to 300° F. (148.8° C.). Use a clean, dry cloth to spread a light film of unsalted shortening over the grill. Let the shortening stand for 2 minutes; then wipe the grill clean. Repeat this process until a slick surface is formed. Wipe off excess shortening.

If dull spots occur after several items have been grilled, wipe the surface with a cloth saturated with unsalted shortening to bring back the shine.

To operate the grill, turn the automatic controls on the grill to the desired temperature. The automatic controls cause the temperature to be the same over the entire surface. Several foods can be cooked at different temperatures at the same time, part of the grill can be turned down (never off) during a slack period.

The leveling adjustments hold the grill surface plate level. When the grill plate is level, there is an even distribution of shortening on the surface plate. The shortening runs to the lower side when the surface plate is not level.

Most grills hold a removable tray to collect grease and food particles. The tray helps to speed up the cleaning process and contributes to the safety and sanitation of food preparation on the grill.

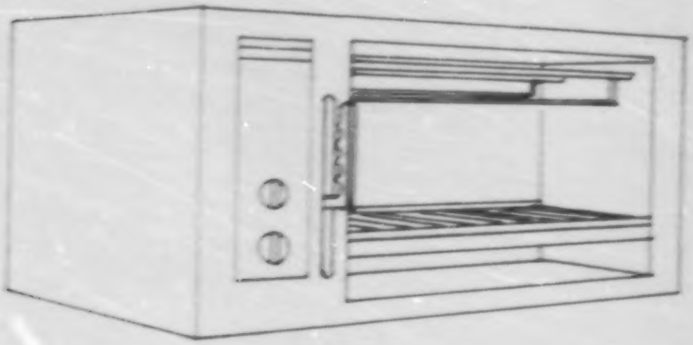
Clean the grill after each use. Allow the grill to cool and scrape the surface with a spatula or a stiff metal scraper. Clean with a pumice stone, wash with a damp cloth, and dry with paper towels or a cloth. Season the grill, after cleaning, with unsalted shortening or salad oil.

Remove the grease trays and wash them in a hot-detergent solution. To keep the controls, chrome surfaces, switches, and thermostat free from grease, wipe these items with a damp cloth and a mild-detergent solution.

HINTS:

1. Do not throw cold water on a hot grill because of the danger of warping.
2. Never use steel wool on the grill as it will mar the surface of the grill. Also some small pieces of the wool may remain on the grill and be picked up later by the food.
3. Avoid using cleaning products that are dangerous to food.
4. Avoid using cleaning products that might scratch the surface of the grill.
5. Do not place pans and pots on the grill; heat them on the range.

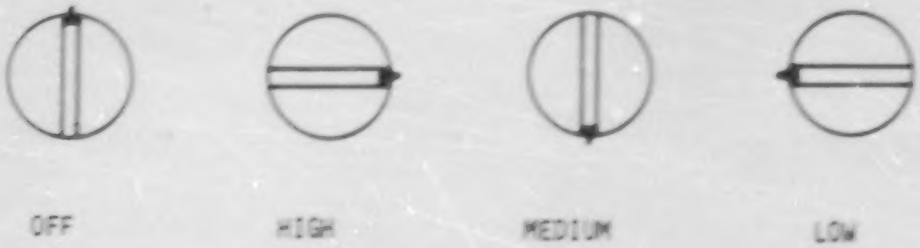
BROILER



The types of broilers include gas, electric, and charcoal models. Broilers may be backshelf models called salamanders, or they may be separate pieces of equipment.

The broiler is used to cook foods by radiant heat. Meats, poultry, seafood, vegetables, and fruits can be prepared by broiling. The food is usually placed on a grill below the heat source of the broiler. When the charcoal model is used, the food is cooked above the heat source. A grid lever control raises or lowers the food in relation to the heat source of the broiler.

The gas model has the standard pilot light and safety cutoff controls. The electric broiler has two coils inside the top of the broiler oven, one in the front and one in the back. The temperature is adjusted by using knobs, which are pulled out and then locked into position. The positions for high, medium, and low are shown below.



Preheat the broiler for 15 minutes before use. (When using the gas model, check the pilot light and gas "On" control.) Pull the grid out and place the food to be broiled on the grid. Use the grill lever control to adjust the grid to the correct distance from the heat source. During cooking time, check the broiler trays to prevent grease fires and flare-ups from fatty items.

To prevent excessive sticking of food, wipe the grill with an oiled cloth and wire brush to remove burned food. At the end of the cooking time, turn the heat source off. The broiler can be kept on standby by turning the switch to the low setting.

Let the broiler cool before cleaning. Remove the grid and use a wire brush on both sides of the grid. Apply a thin layer of oil. Scrape grease and burned-on food particles from the unit. Remove and wash grease traps if they are included on the model. Use hot-detergent solution in cleaning the broiler. Remove the ashes from the tray of charcoal broiler models.

QUESTIONS:

1. When should the "High" setting on electric ranges be used?

2. On gas ranges without pilots, when should you light the match?

3. Draw the positions of the burner knobs for "Off," "High," and "Low" for a gas hot top range.

4. List three functions of the exhaust hood.

   a.
   b.
   c.

5. What is meant by "seasoning" the grill?

6. How is a grill seasoned?

7. Draw the positions for the setting of a broiler on "High," "Medium," "Low" and "Off."

8. List the foods that may be prepared by broiling.

9. What control is used to raise or lower the food in relation to the heat source of the broiler?

ASSIGNMENT:

I. Identify the types of surface cooking equipment used at your training station. List the procedures followed at your training station for the use and care of each piece of surface cooking equipment. Check to see if improvement can be made in your duties when using and caring for the surface cooking equipment.

GROUP WORK:

I. Listen to a guest speaker from a utility company explain the use and care of commercial cooking equipment.

II. In small groups, summarize the general use and care of surface cooking equipment. Estimate the consequences of improper use and care of the surface cooking equipment. Present this information to other groups.

UNIT XI-3

LARGE EQUIPMENT FOR COOKING FOOD

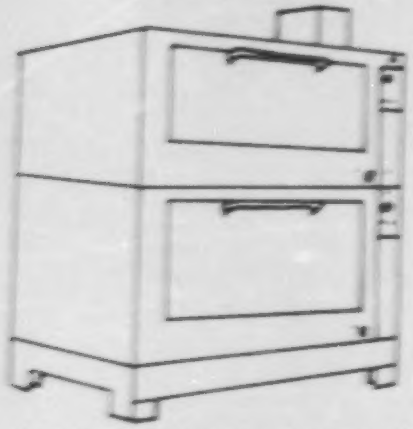
SUBJECT: Owens

TASK: 11. Select and correctly use proper piece of equipment for cooking food.

OBJECTIVES: When you finish this lesson, you should be able to
a. describe functions of and procedures for use and care of ovens
b. identify types of ovens.

Ovens cook foods with dry heat. They may be operated by either gas or electricity. Ovens are available in convection or conventional types.

STACK OR DECK OVEN



The deck oven is used for roasting, baking, and oven frying, and it may be operated by either gas or electricity. The first step in heating an electric deck oven is to turn the directional heat control switch to "Medium" or "High" as needed. Turn the switch on and set the thermostat at the desired temperature. Allow the oven to preheat before the food is placed in it. Remember that the oven does not preheat any faster when it is set at a higher temperature. When the oven reaches proper temperature, place the food in the oven. Load the decks as evenly as possible. Place the pans over the entire deck area, but keep the pans about 2 inches away from the walls and door of the oven to allow space for the circulation of heat.

Do not rest heavy pans on the door, as this may cause the door to spring and prevent it from closing tightly. Keep the vent control closed completely to prevent heat from escaping. To prevent loss of heat and to produce a better product, avoid excessive opening of the door.

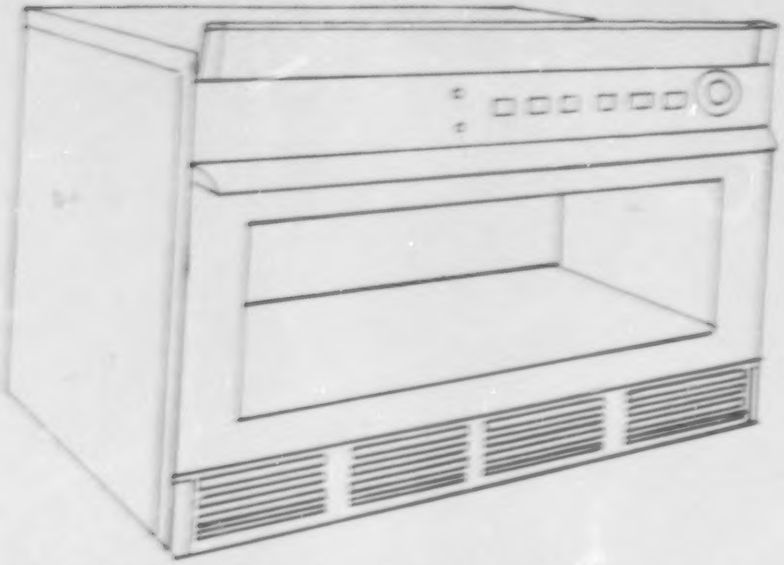
The first step in the operation of a gas deck oven with a pilot light is to turn on the main burner valve. If the oven does not have a pilot, the first step is to turn the thermostat as high as possible. Light the match before turning on the main burner valve. Do not close the oven door until the oven is lighted.

After lighting the burner, set the thermostat at the desired temperature. Just as with the electric oven, setting the thermostat at a high temperature does not decrease the length of time necessary for preheating. When the oven reaches the proper oven temperature, place the food in the oven.

To increase the temperature on either the gas or the electric oven, reset the thermostat dial and wait until the "oven ready" light goes out before loading the oven. To lower the oven temperature, turn the thermostat below the actual temperature required and open the oven door until the "oven ready" light goes on. Close the door, reset the thermostat, and wait for the "oven ready" light to go out again before loading the oven.

Clean the deck ovens daily by scraping them with an oven scraper to remove deposits. Clean the interior oven walls with a damp cloth or wire brush. At intervals, clean crumbs from the return air passage. You may use a solution of 1/2 household ammonia and 1/2 water to clean the exterior surfaces.

MICROWAVE OVEN



REFERENCE: Cornelius, Ethelwyn G. Food Service Careers. Peoria, Illinois; Chas. A. Bennett Co., Inc., 1974. pp. 106-109.

Microwave ovens or electronic ovens cook in minutes the same food that requires hours in a regular oven. Microwave ovens defrost frozen foods and reheat precooked foods in seconds. They are better suited to one fast production of individual servings than they are to heating the quantities of food usually required at one time for dining room service.

The microwaves, or energy waves, are bounced off the metal walls of the oven and through the food containers, where they are absorbed by the food and converted into heat. Employees should be cautioned to avoid possible radiation danger in the use of microwave ovens. Users should stay at least an arm's length away from the front of the oven while it is on and refrain from looking in the viewpoint to watch food cooking. Users should switch the oven off before opening the door.

Food containers which may be used in the microwave oven are glass, paper, and ceramics. Aluminum foil may be used in some of the microwave ovens. Metal containers should not be used in the microwave oven, as the metal may cause tube damage to the unit. The use of plastic containers in the microwave oven is questionable. Some plastic containers may be used with good results; other plastic containers affect the taste of the food, give off a bad odor as the plastic heats, and melt out of shape.

To operate the microwave oven, turn the power switch to the "On" position to heat the unit. Place the food item in the compartment and close the door. Set the timer for the desired time and press the control button. Most microwave ovens shut off automatically when the "time set" is completed.

To clean the microwave oven, wipe the metal pieces with a clean cloth and a water-detergent solution. Dry with a soft cloth.

QUESTIONS:

1. Briefly list the three steps in heating an electric deck oven.

   a.

   b.

   c.

2. Why should a person avoid excessive opening of an oven door during baking?

3. Jane forgot to turn on the oven at the time the head cook told her. When she remembered to do it, she asked Betty if it would preheat faster if she set the thermostat on high. What should Betty have told her?

4. Microwave ovens are best used for ________________ servings.

5. List three containers which may be used in the microwave oven.

   a.
   b.
   c.

ASSIGNMENT:

1. What type of ovens are used at your training station? List the procedure, followed at your training station, for the use and care of each oven. Check to see if any improvement can be made in your duties when using and caring for each oven.

GROUP WORK:

I. Compare the procedures for the use and care of the ovens at your training station with the procedures used by other dietetic aides. Note the various functions of ovens in food preparation.

II. Visit a restaurant supply store to learn about the various types of ovens used in food service. Identify the type used at your training station.

UNIT VII-1

TECHNIQUES OF FOOD PREPARATION

SUBJECT:	Quality Food Preparation
TASK:	12. Read recipes and know terminology, and follow directions.
OBJECTIVES:	When you finish this lesson, you should be able to a. describe general procedures for food preparation b. summarize characteristics of standard recipes.
REFERENCE:	Cornelius, Ethelwyn G. Food Service Careers. Peoria, Illinois: Chas. A. Bennett, Co., Inc., 1974. pp. 97-100.

GENERAL PROCEDURES IN FOOD PREPARATION

Quality food must be produced and served in health care establishments in a given amount of time and at a reasonable cost in order to satisfy both the patient and the management. Labor costs for food preparation make it necessary for the personnel, equipment, and supplies to be organized efficiently. Speed and accuracy are improved by using time and skills wisely. The following procedures will contribute to the development of speed and accuracy on the part of the dietetic aide.

1. Read the recipe carefully before beginning. To obtain the best results, follow the directions exactly as given.

2. Check to see that all the necessary ingredients are available.

3. Make substitutions in ingredients only when necessary to reduce cost, to save time, or to make use of surplus commodities on hand.

4. Check to see that the necessary equipment or a suitable substitute is available before beginning.

5. Be able to apply terms used in the recipe.

6. Estimate the time required for preparation of the product and plan so that the product will be finished at the proper time.

STANDARD RECIPES

Success in the area of food preparation involves using recipes as guides for preparing food of high quality. In order to achieve quality products, time after time, a cook should standardize recipes and methods of food preparation.

Have you ever thought about recipes being something like formulas? A chemist carefully follows a formula to make a compound, just as a cook must carefully follow a recipe to make a food product. A standard or dependable recipe is, therefore, a must if the result is always to be of the same quality. Standard recipes include the following information.

1. Amount of ingredients
2. Utensils to be used
3. Clear directions about how to combine ingredients
4. Cooking temperatures and length of cooking time
5. Number of servings
6. Size of servings
7. Number of portions per pan, quart, or gallon
8. Terms which are familiar to most cooks

QUESTIONS:

1. Mary has been assigned to prepare Plain Muffins. It is now 10:30 a.m. and the muffins are to be served at 12:00. Using the information below, compare Mary's preparation procedure with the general procedures for food preparation given on page 151.

PLAIN MUFFINS

5 1/4 qt. all-purpose flour	10 large eggs
2 1/4 c. sugar	2 c. nonfat dry milk
1 cup less 2 T. baking powder	2 qt., 2 1/3 c. water
1/4 cup salt	2 1/4 c. shortening

Blend dry ingredients 5 minutes in mixer on low speed. Cut in fat. Beat eggs and combine with water. Add to dry ingredients. Stir only until dry ingredients are moist and mixture has a rough appearance. Using # 16 scoop (1/4 cup), portion into greased muffin pans. Bake 20 minutes at 400° F. or 204.4° C. (hot oven). Makes 100 muffins.

Mary proceded in the following manner:

(1) She measured the shortening and then checked to see that she had all the necessary ingredients.
(2) She blended the dry ingredients for 5 minutes and cut in the fat.
(3) She beat the eggs and added the water.
(4) She next beat the dry ingredients into the liquid mixture.
(5) Then she used a # 16 scoop to portion the batter into greased muffin tins.
(6) Lastly she turned the oven to 400° F. (204.4° C.). It was then 11:50 A.M.

Which four procedures in food preparation did Mary fail to observe?

2. Tom was assigned the task of preparing Blueberry Muffins. He was instructed to use the preceding recipe for Plain Muffins; however, 2 c. of drained, canned blueberries were to be added to the muffin mix. Tom prepared the muffins as follows.

   (1) He blended the dry ingredients.
   (2) He cut the shortening into the dry ingredients.
   (3) He set the oven for 400° F. (204.4° C.).
   (4) He greased the muffin pans.
   (5) When he was ready to mix the dry ingredients with the liquid ingredients, he discovered that he did not have any eggs.

   Which four procedures in food preparation did he fail to observe?

3. The head cook asked Ethel to experiment with three recipes she had found for tuna casserole. Ethel carefully measured and mixed the ingredients in the first recipe and put the casserole into the oven. Ethel had several questions to ask about the recipe as she prepared the casserole: (1) What cooking temperatures should be used? (2) How many servings would it provide? (3) What were the meanings of several terms used in the recipe? When the casserole was taken from the oven, it was over-cooked and it provided fewer servings.

   a. What information was missing from the recipe that should be included in a standardized recipe for quantity food preparation?

   b. Why is it especially important to use standardized recipes in a health care establishment?

4. In what order are the ingredients and steps in a standard recipe written?

ASSIGNMENT:

I. Evaluate a quantity recipe. Keep in mind the information that a standard recipe should include.

GROUP WORK:

I. Work in small groups to study a specific quantity recipe. Describe how to use it correctly. Consider the procedure that will contribute to the speed and accuracy of food preparation.

UNIT VII-2

TECHNIQUES OF FOOD PREPARATION

SUBJECT: Terminology Used in Food Preparation

TASK: 12. Read recipes and know terminology, and follow directions.

OBJECTIVES: When you finish this lesson you should be able to
a. identify abbreviations used in recipes
b. make standard substitutions in recipes
c. use standard equivalents in preparing quantity food
d. select the most efficient measurement for the ingredients in a recipe
e. identify the terminology used in recipes.

REFERENCE: Cornelius, Ethelwyn G. Food Service Careers. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1974. pp. 101, 117-119.

COMMON ABBREVIATIONS FOR FOOD PREPARATION

Abbreviations are used to save time and space in writing recipes. Ability to use quantity recipes is dependent on knowledge of commonly used abbreviations. Abbreviations commonly used in food preparation are given below:

approximately = approx.
average = av. or avg.
calorie = Cal.
centigram = cg.
centimeter = cm.
cup = c.
degrees Centigrade = °C.
degrees Fahrenheit = °F.
dozen = doz.
few grain = f.g.
fluid = fl.
gallon = gal.
gram = gm.
hour = hr.
joule = J
kilometer = km.
large = lg. or lge.

medium = med.
meter = m.
milligram = mg.
milliliter = ml.
minute = min.
monosodium glutamate = M.S.G.
ounce = oz.
pint = pt.
pound = lb.
quart = qt.
second = sec.
small = S., sm., or sml.
speck = spk.
square = sq.
tablespoon = T., tb., or tbsp.
teaspoon = t., ts., or tsp.
temperature = temp.
weight = wt.

Additional abbreviations which may be found in quantity food recipes are the following:

as purchased-(A.P.)--This means that the weight or measure should be taken without any preparation of the food. Examples: flour unsifted, lettuce whole, eggs unshelled, etc.

edible portion-(E.P.)--This means that only the part of the food normally eaten or used in cooking is being considered. Peanuts after being shelled, eggs out of shell, etc. Recipes generally specify any preparation an ingredient needs before it is used, i.e., sift, chop, mince, etc.

SUBSTITUTIONS

The food service employee should become familiar with the substitutions commonly used in recipes. Substitutions may be made to cut down on cost, to save time, to increase the food value, or to make use of surplus commodities.

Standard substitutions are:

1 sq. chocolate = 3 T. cocoa and 1 T. fat
1 c. cake or pastry flour = 7/8 c. all-purpose flour
1 T. cornstarch = 2 T. flour (for thickening)
1 t. baking powder = 1/4 t. soda and 1/2 t. cream of tarter
1 c. milk = 1/2 c. evaporated milk and 1/2 c. water
= 1 c. reconstituted nonfat dry milk plus 2 t. fat
1 c. sour milk or buttermilk = 1 c. fresh milk plus 1 T. vinegar or lemon juice (let stand 5 minutes)
1 c. sour milk and 1 t. soda in flour mixture = 1 c. fresh milk plus 3 t. baking powder
1 T. corn syrup (in candy) = 7/8 t. cream of tarter
1 c. butter = 1 c. margarine or 7/8 c. fat plus 1/2 t. salt
1 whole egg = 2 egg yolks or 2 T. dried whole egg plus 2 1/2 T. water
1 c. honey = 1 to 1 1/4 c. sugar plus 1/4 c. liquid

EQUIVALENTS

The successful use of a recipe depends largely upon accuracy in measuring the ingredients. To be able to measure accurately, one must become familiar with the commonly used equivalents listed below:

EQUIVALENTS OF COMMON MEASURES

3 t. = 1 T.
16 T. = 1 c.
1 T. = 1/2 fl. oz.
1 c. = 8 fl. oz.
2 c. = 1 pt.
1 pt. = 16 fl. oz.

2 pt. = 1 qt.
1 qt. = 32 fl. oz.
4 qt. = 1 gal.
16 oz. = 1 lb.
spk. = less than 1/8 t.
f.g. = less than 1/8 t.
pinch = less than 1/8 t.

TERMS USED IN FOOD PREPARATION

To be successful in quantity food preparation, the dietetic aide must be able to identify terminology used in standard recipes. He must also master certain food preparation techniques. A list of terms are defined below to provide a basis for interpreting directions used in recipes for meats, salads, vegetables, fruits, desserts, and pastries. No attempt has been made to make this list complete. The terms have been grouped into areas in which they are used most frequently. However, many of the terms listed are used in other types of cookery as well.

TERMS USED IN MEAT COOKERY

Bake	to cook by dry heat in an oven
Baste	to spoon liquid over food as it cooks; the liquid may be drippings from the food
Bouillon	a clear broth from meat juices
Bouillon Cubes	a commercially prepared concentrated broth packaged in cubes
Braise	to cook slowly in a covered utensil in a small amount of liquid or in steam; meat may or may not be browned in small amount of fat before braising
Bread	to roll in bread or cracker crumbs, such as breaded cutlets
Broil	to cook by exposure to direct heat on a grill or over live coals, such as broiled chicken or steaks
Cube	to cut into squares about 1/2 inch in size
Dredge	to coat with flour or other fine substance
Dust with flour	to sprinkle with flour as "flour the meat"; technique may also be used with vegetables
Entree	the name given to the food dish served as the main course
Fillet (Filet)	to separate a raw, choice piece of meat or fish, from the bones; also the name of the piece after being cut. Example: filet mignon.
Fricassée	to cook by braising; usually applied to fowl, rabbit, or veal cut into pieces
Grill	to cook by direct heat
Grind	to reduce to particles by cutting or crushing

Marinate	to let food stand in a marinade, usually an oil-acid mixture like French dressing to tenderize or add flavor; technique may be used with vegetables or other foods
Roast	to cook in an uncovered pan in an oven
Sear	to brown the surface of meat by heating at high temperature for a short time; adds color and flavor to meats
Season	to improve flavor by adding salt, pepper, or spices
Smother	to cover with sauce or vegetables. Example: smothered calf's liver is covered with onions.
Stuff	to pack a mixture into a cavity, as with turkey or bell peppers

TERMS USED IN PREPARATION OF SALADS, VEGETABLES, AND FRUITS

Au gratin	dishes prepared with a white sauce, topped with bread crumbs and cheese, then baked for a short period
Blanch	to dip into boiling water, making the skins of fruit and nutmeats easy to remove or stopping action of enzymes
Chill	to place in the refrigerator until cooled to a temperature between 40°-45° F. (4° - 7° C.)
Chop	to cut into pieces less than 1/2 inch in diameter with a sharp knife or other tool
Congeal	to cause foods to become firm by lowering the temperature enough to thicken the gelatin in the food
Cool	to lower the temperature
Core	to remove the core or center of fruit (apples, etc.)
Cut	to divide food into small irregularly shaped pieces
Dice	to cut into small cubes
Garnish	to add a decoration (usually edible) to a food to make it more attractive
Grate	to form flakes by rubbing food with pressure against a grater
Hull	to remove the stem and cap from berries; also, to remove husks and silks from corn

Julienne	to cut foods, such as potatoes, cheese, meats, and carrots, into pieces the size and shape of match sticks
Mash	to pulverize by pressing and working with a wire or flat-headed device
Mince	to cut or chop into very small pieces
Pare	to cut off the outside covering with a knife or other utensil
Peel	to strip off the outside covering by hand
Pit	to remove the stone (pit) or seeds from fruit
Purée	to force cooked foods through a strainer or to run them through a blender to make a thick, smooth pulp
Reconstitute	to restore concentrated foods to their normal state usually by adding water. Examples: dried milk, frozen juice
Scallop	thinly sliced layers of food sprinkled with flour, salt, pepper, bits of fat, or cheese; food is layered until baking dish has desired amount; liquid (vegetable juice or milk) is added; then food is baked in a slow oven
Thaw	to bring to a temperature above freezing
Unmold	to loosen and remove from a container

SURFACE COOKING TERMS

Boil	to cook in water or other liquid until bubbles rise continuously and break on the surface
Coat-the-spoon	to cover a metal spoon with an even film of thickened sauce
Coddle	to cook in water below the boiling point, as with coddled eggs
Cool	to lower the temperature
Deep-fat fry	to cook in deep fat
Dilute	to lessen the strength, thickness, or flavor of a mixture, usually by adding water
Dip	to plunge into a liquid or dry ingredient until covered and then to remove quickly
Dissolve	to combine or mix a solid ingredient with a liquid until a solution is formed

Fry	to cook in fat
Grill	to fry, saute, or toast on a solid heated surface or griddle; a form of pan-broiling
Melt	to liquefy by heat
Pan (Panning)	to cook a vegetable in a tightly covered skillet in a small amount of fat; no water is added. (Term also has a different meaning in commercial baking)
Pan-broil	to cook uncovered on a hot ungreased surface (usually a frying pan), pouring off fat and liquids as they accumulate
Pan-fry	to cook in a small amount of fat
Parboil	to simmer until partially cooked
Poach	to cook in a hot liquid, being careful to retain shape, as with poached eggs
Sauté	to brown quickly in a small amount of fat, turning frequently
Scald	to heat to a temperature just below the boiling point
Simmer	to cook in a liquid at a temperature of about 185° F. (85° C.); bubbles form slowly and break below the surface
Steam	to cook in steam with or without pressure
Thicken	to cause a food to become firmer by the addition of eggs, flour, or other products, and by cooking them for an additional period of time. Gelatin may be added to a hot food to make the food become firm when chilled.

BAKING AND PASTRY TERMS

Beat	to mix until smooth, using an up-and-over motion
Blend	to thoroughly mix two or more ingredients
Cream	to stir or beat one or more foods until smooth and creamy; usually applies to fat and sugar
Cut-in	to chop fat into small particles in dry ingredients by using two knives or a pastry blender
Dot	to cover with small particles, as to dot with butter
Fold	to combine ingredients by cutting vertically through a mixture and turning it over by sliding the spoon or rubber spatula across the bottom of the bowl with each turn

Level Off	to move the straight edge of a knife or spatula across the edge of a measuring cup or spoon, scraping away the excess dry ingredient
Meringue	a mixture of stiffly beaten egg whites and sugar which is lightly browned in the oven
Mix	to combine ingredients
Mold	to mix, knead, or press into required consistency or shape
Scant	to fill a little less than a full measure. A scant teaspoon would be slightly more than 3/4 and less than one full teaspoon
Sift	to separate into fine particles with a sieve
Steam	to cook in steam with or without pressure
Steep	to let stand in a liquid below the boiling point in order to bring out flavor, color, and other qualities
Stir	to mix food materials with a circular motion
Toast	to brown with dry heat
Whip	to rapidly beat cream, eggs, or gelatin dishes to incorporate air and increase volume

QUESTIONS:

1. Differentiate between the following terms:

   a. Pan-fry - Sauté

   b. Dice - Mince

   c. Boil - Simmer

   d. Blend - Cream

   e. Chill - Cool

   f. Boil - Parboil

   g. Beat - Whip

   h. Cut - Cut-in

   i. Blanch - Scald

In questions 2-13, match the definition with the term.

Definitions

_____ 2. to spoon liquid over food as it cooks
_____ 3. to strip off the outside covering by hand
_____ 4. to mix food materials with a circular motion
_____ 5. to force cooked foods through a strainer to make a smooth thick pulp
_____ 6. dishes prepared with a white sauce, bread crumbs, and cheese, then baked for a short period
_____ 7. to liquefy by heat
_____ 8. to lessen the strength, thickness, or flavor of a mixture, usually by adding water
_____ 9. to cook in steam with or without pressure
_____ 10. to cook in a hot liquid, being careful to retain the shape of the food
_____ 11. to separate into fine particles with a sieve
_____ 12. to add a decoration to a food to make it more attractive
_____ 13. to pulverize by pressing and working with a wire or flat-headed device.

Terms

a. Au gratin
b. Bake
c. Baste
d. Bread
e. Dilute
f. Garnish
g. Poach
h. Puree
i. Mash
j. Melt
k. Sift
l. Steam
m. Stir
n. Sear
o. Peel

14. Classify the following food terms according to the four food preparation areas where they most probably would be used.

bread
boil
chop
cream
cut-in

garnish
grate
marinate
mix
peel

baste
sift
braise
scallop
whip
fry

broil
blend
mince
sear
blanch
simmer

Meat Cookery	Preparation of Salads, Vegetables, and Fruits	Surface Cooking	Baking and Pastry

Write the abbreviations for each word that is underlined in the following recipes:

Chili Con Carne (for 50)

		AMOUNT	INGREDIENT
______________	15.	3 pounds	Beans, kidney
______________	16.	1 gallon	Water, boiling
			ADD
______________	17.	9 pounds	Beef, ground
______________	18.	8 ounces	Onion, chopped
			ADD
______________	19.	1 1/2 quarts	Tomato purée
______________	20.	2 ounces	Chili powder
______________	21.	3-4 ounces	Cumin seed, ground
______________	22.	3 tablespoons	Salt
______________	23.		Water to make a total volume of 3 gallons
______________	24.		Let simmer about 3 hours
			ADD, while stirring
______________	25.	5 ounces	Flour
______________	26.	2 cups	Water, cold

Fudge

______________	27.	2 cups	Sugar
______________	28.	2/3 cup	Milk
______________	29.	1 1/2 tablespoons	Light corn syrup
______________	30.	2 squares	Chocolate
______________	31.	few grains	Salt
______________	32.	3 tablespoons	Butter
______________	33.	1 teaspoon	Vanilla extract

34. Mary's employer asked her to make a chocolate cake. The recipe called for 2 cups of cake flour, 1 2/3 c. sugar, 1/2 c. shortening, 1 t. salt, 3 sq. melted chocolate, 1 c. sour milk, 1 t. soda, 3 eggs, and 1 t. vanilla. On checking her supplies Mary found all the needed ingredients except:

3 sqs. chocolate
1 c. sour milk
2 c. cake flour
1 t. soda

If Mary uses cocoa, sweet milk, and all-purpose flour for the items she does not have, what amount of the substitutions will she use?

35. Mary wants to make fudge icing for the cake.

The recipe called for:		Mary found:
2 c. sugar		sugar
1 c. milk	(a) *	non-fat dry milk
1/4 t. salt		salt
2 sq. chocolate	(b) *	cocoa
2 T. light corn syrup	(c) *	cream of tartar
2 T. fat		fat
1 t. vanilla		vanilla

How can Mary use the starred (*) ingredients as substitutes for the ingredients listed in the recipe? Give the amounts needed in each case and any additional ingredients she will need.

36. Write the word for each of the following abbreviated terms:

a. 10 Cal. per slice a. ____________________
b. 1 lb. sugar b. ____________________
c. Cook at 350° F. c. ____________________
d. 2 c. water d. ____________________
e. Beat for 10 min. e. ____________________
f. f.g. pepper f. ____________________
g. Let stand for 20 sec. g. ____________________
h. 1 t. salt h. ____________________
i. 1 med. orange i. ____________________
j. 2 tbsp. chopped onion j. ____________________
k. 3 T. cornstarch k. ____________________
l. Bake for 1 hr. l. ____________________
m. 1 tsp. cinnamon m. ____________________
n. 4 T. M.S.G. n. ____________________
o. 1 lg. apple o. ____________________
p. 5 oz. coconut p. ____________________
q. Cool at room temp. q. ____________________
r. 1 sml. banana r. ____________________
s. Wt. of baked cake s. ____________________

37. Write the equivalent for the following measurements:

a. 3 t.	a. ____________
b. 16 T.	b. ____________
c. 8 fl. oz.	c. ____________
d. 2 c.	d. ____________
e. pinch	e. ____________
f. 2 pt.	f. ____________
g. 4 qt.	g. ____________
h. 16 oz.	h. ____________
i. f.g.	i. ____________
j. spk.	j. ____________
k. 1/4 c.	k. ____________
l. 1/2 c.	l. ____________
m. 3/4 c.	m. ____________

38. Josie will help in the baking area this week. She has been asked to double the amount of ingredients in a cookie recipe for the baker. Show what amounts, using the largest equivalents, are needed of each ingredient after doubling the recipe.

____________ a. 1 c. sugar
____________ b. 1 c. margarine
____________ c. 2 t. vanilla
____________ d. 12 oz. flour
____________ e. 2 T. cocoa

39. Lynn's work station for this week is in the serving area. One of her tasks on the work sheet is to prepare 1 1/4 gal. fruit punch. The recipe she is using makes 2 1/2 gal. punch. Show how she will adjust the measurements to fit her task (use largest equivalent).

____________ a. 4 1/2 c. sugar
____________ b. 3 c. water
____________ c. 2-6 oz. cans orange juice, frozen
____________ d. 2-6 oz. cans lemon juice, frozen
____________ e. 1 gal. water makes 2 1/2 gal. punch

40. One of the tasks on Sue's work sheet today is to measure ingredients for apple crisp. A red-penciled note attached to the recipe said "make 3 X the recipe." Complete the blanks to show largest equivalent measurement she should use when she triples the recipe.

____________ a. 10 lb. sliced apples
____________ b. 8 oz. sugar
____________ c. 1/4 c. lemon juice
____________ d. 1 lb. 4 oz. margarine
____________ e. 12 oz. flour
____________ f. 12 oz. rolled oats, uncooked
____________ g. 2 lb. brown sugar

41. Ann is preparing a salad for general diets using the ingredients listed below. Convert the amounts called for in the recipe into the largest equivalent to speed up the measuring process.

____________________ a. 4 qt. lettuce
____________________ b. 2 pts. tomatoes
____________________ c. 2 c. celery
____________________ d. 2 c. radishes
____________________ e. 16 T. oil
____________________ f. 8 oz. vinegar
____________________ g. 3 t. sugar
____________________ h. 3 t. paprika

42. Mary is helping the chef by measuring the ingredients for a cheese sauce. Figure the amounts, to the largest equivalents, that she will use:

____________________ a. 4 pts. milk
____________________ b. 8 T. fat
____________________ c. 8 T. flour
____________________ d. 3 t. salt
____________________ e. 24. oz. grated cheese

ASSIGNMENT:

I. Prepare a "Word-a-gram" using the terms used in food preparation. For the "Word-a-gram" choose one of the following topics: (a) meats; (b) salads, vegetables and fruits; (c) surface cooking or (d) baking and pastry. (Try to use all of the terms in the group you choose.) Here is an example using the months of the year.

```
          J                         M A R C H
    J A N U A R Y         N           P
      U   N               O C T O B E R
      G   E     F         V           I
      U       D E C E M B E R         L
      S         B         M
S E P T E M B E R         B
          A     U         E
          Y     A         R
                R
          J U L Y
```

GROUP WORK:

I. Divide into two teams to play "Cooking Charades." Place cooking terms on individual sheets of paper in a container. Each team takes turns acting out a cooking term which is drawn from the container. The team identifying the most terms is the winner.

II. Study the list of common measures and abbreviations used in food preparation. Divide into two teams to play "Jeapordy." Place a small bell on a desk. The leader will call out answers about the measures and abbreviations. The first, second, etc. person in line must run up, ring the bell, and give the answer in the form of a question. Example: Leader says, "May be writen as T., tb., or tbsp." Student would say: "What is the abbreviation for tablespoon?" Student may confer with team members before ringing the bell, but he must answer immediately after ringing. Leader should repeat questions for reinforcement.

UNIT VII-3

TECHNIQUES OF FOOD PREPARATION

SUBJECT: Convenience Foods

TASK: 12. Read recipes and know terminology, and follow directions.

OBJECTIVES: When you finish this lesson, you should be able to
a. identify convenience foods
b. list reasons for using convenience foods.

REFERENCE: Cornelius, Ethelwin G. *Food Service Careers*. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1974. p. 96.

Health care establishments are using more convenience foods today than ever before. The increased use of convenience foods is due to:

1. a shortage of trained personnel due to the lack of culinary schools in the U.S. and to the reduced immigration of trained personnel from other countries.
2. technological advances in refrigeration, processing, and packaging.

Dietary kitchens vary greatly in the type and number of convenience foods used. Some serve many convenience foods, some use only convenience entrees, and others only a few convenience ingredients.

A *convenience food* requires little preparation at serving time because it has been pre-prepared by someone else. Convenience foods are available in several forms: fresh, frozen, freeze-dried, dehydrated or canned. Some examples of convenience foods are pre-cut portions of fish, meats, or poultry (uncooked or partially cooked); frozen or canned fruits and vegetables; cleaned and packaged fresh, chopped or shredded, peeled and cut fruit for use in salads and desserts or as garnishes; cake and other baked product mixes; soups; gravy and sauce bases; and packaged individual portions of condiments and beverages.

Convenience foods are not new; in fact, some have been used for many years. Sausage, gelatins, and packaged pudding mixes are among the oldest convenience foods. Instant potatoes is one convenience product that has been accepted by a majority of health care establishments. They come in flakes or granules and have a natural flavor, a white color, and the mealy (not sticky) texture of a perfectly prepared product. In addition to saving time and energy during preparation, instant potatoes offer the advantage of requiring less storage space. Three cases of #10 cans are equal to about 900 pounds of raw potatoes and require only one-eighth of the storage space. Having the potatoes in easy-to-handle cases and boxes instead of bins makes inventory simpler. Instant potatoes have many uses as ingredients for soups, as thickening in gravies and sauces, as an ingredient in batters for coating vegetables and meats before deep frying, and as an ingredient in muffins and biscuits, stews and casseroles, salads, cakes and confections.

Recent innovations have made gelatins and puddings even more convenient. Gelatin has traditionally been prepared from a base of animal protein, but the new gelatins are made with a base called carragenan. Carragenan is a vegetable protein derived from marine plant life. The gelatins made from this new base product set in 15 minutes without refrigeration. Molds will stand at room temperature without becoming rubbery or melting. Fruits and vegetables may be added within a matter of minutes. A molded gelatin "pops" right out of the mold without using hot water. Additional convenience in puddings has been achieved through canning. Canned puddings are spooned directly into dessert dishes for serving.

The quality of some convenience foods is higher than that of regularly prepared foods. The convenience foods are processed when the nutritive value of the foods is at its peak. They are processed rapidly to retain nutrients and are either canned or quick frozen immediately. Fresh foods may incur a high loss of nutritive value as they pass through the various steps in marketing. Convenience foods also have a more consistent quality due to the rigid standards under which they are processed.

Today a variety of convenience foods are available including entrees, soups, sauces, vegetables, fruits, salads, and desserts. Menus which use convenience foods are limited only by the imagination of the menu developer. For instance the entrees for the main meal of the day might include:

Salisbury Steak with Mushroom Gravy
Meat Loaf with Tomato Sauce
Ham Steak with Pineapple Sauce
Chicken Friscassee

New equipment which speeds the preparation of convenience foods includes:

1. microwave or electronic ovens which cook in minutes the same food that requires hours in a regular oven.

2. reconstituting ovens (combination freezers and ovens) which are capable of storing up to 360 pounds of frozen foods at 0° F. (-17.8° C.) and then heating the food to 165° F. (73.8° C.) in 55 minutes.

The labor shortage has created a demand for more and more convenience foods in order to meet the needs of health care institutions. The cost of using convenience foods is usually higher than the cost of using regularly prepared foods. However, the labor cost is lower, sometimes as much as 20 to 25 per cent. Space requirements for food preparation may be reduced from 5 to 20 per cent. The equipment needed may be as much as 20 per cent less. These reductions more than offset the higher cost of using convenience foods. Further savings occur because waste is almost entirely eliminated. There is less leftover food and less waste in cleaning and portioning foods. Another advantage is that portion sizes can be standardized and the cost per portion more accurately determined.

This modern approach to food preparation allows management to put to use the talents of young, inexperienced employees who may be working their way through school, or perhaps of young housewives who only want to work part-time. Employees working with convenience foods need an ability to add seasonings and spices to convenience foods and to plate and garnish foods attractively.

QUESTIONS:

1. What is a convenience food?

2. List five examples of convenience foods.

   a.
   b.
   c.
   d.
   e.

3. What are four processes used to preserve convenience foods?

   a.
   b.
   c.
   d.

4. One of the factors leading to greater use of convenience foods is a shortage of
   _____a. regular food.
   _____b. equipment.
   _____c. personnel.

5. The use of convenience foods provides all of the following except
   _____a. a reduction in preparation time and labor.
   _____b. a reduction in amount of "leftover" food.
   _____c. a lower priced food item.
   _____d. more standardization in size of portions.

6. The quick-setting quality of the vegetable protein gelatins is a major advantage over the traditional animal protein based product. The new gelatin can be expected to set in
   _____a. 20 minutes.
   _____b. 15 minutes.
   _____c. 10 minutes.
   _____d. 7 minutes.

7. The higher cost of convenience foods is offset by reductions in all but the amount of

_____a. space needed.
_____b. equipment needed.
_____c. labor needed.
_____d. food needed.

8. The quality of convenience foods may be higher than regular foods because convenience foods are

_____a. processed at the peak of nutritive value.
_____b. prepared in small amounts.
_____c. processed in large quantities.
_____d. prepared in the maximum amount of time.

9. The consistency of quality in convenience foods is due to quality control standards used during

_____a. cooking.
_____b. preparation.
_____c. processing.
_____d. serving.

10. A reconstituting oven is an appliance used in preparing convenience foods. It is a combination of

_____a. refrigerator and oven.
_____b. freezer and oven.
_____c. cold storage and food warmer.
_____d. food warmer and defroster.

11. Using instant potatoes offers all except one of the following advantages:

_____a. preparation requires less time and energy.
_____b. preparation requires less storage space.
_____c. preparation requires no inventory.
_____d. preparation requires no paring.

ASSIGNMENT:

I. List the convenience foods used at your training station and describe the various ways in which they are used.

GROUP WORK:

I. Share the lists you made in the above assignment with other dietetic aides. Compare and contrast the use of convenience foods in each of the health care establishments in which you are employed.

UNIT VII-4

TECHNIQUES OF FOOD PREPARATION

SUBJECT:	Techniques of Portioning Food
TASKS:	13. Assemble diet orders and place them on plates and trays. 14. Verify diet orders by scanning filled plates to insure specified portion and quality of food.
OBJECTIVES:	When you finish this lesson, you should be able to a. cite reasons for portioning food b. list methods used to portion foods for serving.
REFERENCE:	Cornelius, Ethelwyn G. Food Service Careers. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1974. p. 112.

The dietitian determines the appropriate portion size or the amount of food to be served to the patient. This decision is influenced by the type of meals, food choices, serving methods, patient's dietary needs, and the cost of food and supplies.

Establishing the size of a portion:

1. Enables food service personnel to request correct amounts of food and supplies without overstocking.

2. Help make possible the serving of freshly prepared food daily, thus preventing the necessity of serving or planning the use of leftovers.

3. Cuts down on waste and loss of food nutrients by insuring adequate but not overly large servings, thereby reducing food cost.

4. Prevents underproduction as well as overproduction of food to be served, by using standard yields, recipes, and purchases.

5. Simplifies food preparation.

6. Helps provide attractive and uniform servings. Many institutions purchase foods which have been pre-shaped or cut into standard sizes. The most common ones are for the protein portion of the meal, such as meat loaf, chicken, and dressing.

7. Assists in establishing a cost control system.

Regardless of the size, the portion should appear ample without looking too standardized. One may accomplish this by selecting the proper size and color of plate. A large amount of food on a small plate may appear sloppy. A small amount of food on a large plate appears inadequate. The appearance of food can be improved with the addition of a colorful garnish.

The selection and use of the proper equipment for portioning foods makes the task easier. The dietetic aide should become familiar with the established list of portion sizes used in his training station. The list includes portions per pound, piece, slice, package, or count volume. Examples are: 1/4 lb. hamburger, 2 pieces chicken, 1 slice ham, 1 pkg. salt, and 1 med. orange per serving or portion. The dietetic aide should learn the size dish or plate on which foods are to be served and the equipment that is required for serving specified foods.

Pre-portioning certain foods assures serving the correct amount during the busy period. Some foods are portioned before cooking, some after. Accuracy in pre-portioning is made possible by using the following equipment and pre-packaged foods.

1. Standard size pans which permit the food to be cut into the number of servings indicated in the recipe. The use of a stainless steel ruler or marked pans insures accurate portions. Examples: brownies, gelatin salad, cake.

2. Standard scoops, ladles, dippers, spoons, and tongs in various sizes for specific foods. Examples: mashed potatoes, ice cream, gravy, sandwich fillings, some salads and desserts, meat balls.

3. Individual, correctly-sized casseroles, molds, custard cups, soufflé cups, and other dishes. Examples: macaroni and cheese casserole, baked custard, gelatin salads.

4. Standardized scales for weighing portions. Examples: meat, yeast breads, cake batter, special diet foods for patients.

5. Slicing machines or slicers which give portions of the correct size for breads, vegetables, and meats. Cutters and slicers are also used for butter and cheese.

6. Individual size cream pitchers and individual pots or vacuum containers for hot beverages.

7. Pre-packaged portions of sugar, catsup, mayonnaise, salt, pepper, crackers, cereal, milk, ice cream, and other goods.

8. Meats purchased in slices and served or cut into the desired number of uniform servings. Examples: pre-portioned hamburger patties, Salisbury steak.

If serving food is one of your tasks, make the serving the exact size specified by your supervisor. Serving extra food or failure to use the size dipper or ladle specified for the food can cost the health care establishment many dollars and may be harmful to the patient. An employee's indifference toward his role in keeping costs down can soon cost him his job.

QUESTIONS:

1. Portion control means ____.

2. The amount of the portion of food to be served is decided by the ________________________.

3. What can be done to make pre-determined portions look appetizing when served?

   a.
   b.

4. Name five pre-packaged items that may be used in serving patients.

   a.
   b.
   c.
   d.
   e.

Accuracy in pre-portioning is made possible by the use of the following equipment. For each piece of equipment listed locate the food item associated with it. Place the letter corresponding to your choice in the blank to the left of each piece of equipment. Food items may be used more than once.

Pre-Portioning Equipment	Food Item
_____ 5. Standard size pan	a. Bread
_____ 6. Standard scoop, dipper	b. Cereal
_____ 7. Individual baking dish	c. Gelatin Salad
_____ 8. Standard scales	d. Ice Cream
_____ 9. Standard slicer	e. Macaroni and Cheese Casserole
_____10. Pre-packaged portions	f. Meat

ASSIGNMENT:

I. List and explain food portioning techniques which are used at your training station.

GROUP WORK:

I. Share the food portioning techniques used at your training station with class members. Discuss the advantage of each food portioning technique.

UNIT VII-5

TECHNIQUES OF FOOD PREPARATION

SUBJECT: Work Simplification and Work Schedules

TASK: 15. Plan work schedule so foods are ready at serving time.

OBJECTIVES: When you finish this lesson, you should be able to
a. define the purpose and need for work simplification
b. apply motion economy principles to job performance.

REFERENCE: Cornelius, Ethelwyn G. Food Service Careers. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1974. pp. 270-271.

The increased minimum wage is making it necessary for managers of health care establishments to look for ways to improve the efficiency of their operations. Each employee must perform a day's work for a day's pay if the health care establishment is to operate within its budget. One cause of inefficient operations is employee fatigue, which results in a drop in energy, enthusiasm, and output.

There are two types of fatigue: physical and mental. Physical fatigue results from muscular exertion. Mental fatigue is a slowing down of nerve impulses. The employee feels tired although he is not physically tired. Fatigue may be due to factors in the employee's personal life, such as lack of sleep, problems at home, or poor diet. In many cases fatigue may be due to working conditions or procedures on the job.

One method of reducing employee fatigue is work simplification. Work simplification has been defined as "seeking the simplest, easiest, and quickest method of doing work." This does not mean that the employee must work harder and faster, but that the nonessential parts of the operation are eliminated. Every task is divided into (1) getting ready (setting up equipment), (2) doing (actual production), and (3) putting away (cleaning up and putting away).

Some general work simplification guides to follow for reducing fatigue and increasing the efficiency are:

1. Plan ahead--think through all the steps in the task before beginning.
2. Eliminate unnecessary steps or movements.
3. Assemble all supplies before beginning work.
4. Select the best tools for the job.
5. Keep your mind on your work.
6. Maintain good posture.
7. Clean up as the job is completed.

RULES FOR MOTION ECONOMY

	RULE		EXAMPLE
1.	Use hands in unison or move arms at the same time.	1.	When placing a carton of milk, and an empty glass on a tray, reach for the carton with the left hand and for the glass with the right hand.
2.	Move arms simultaneously in opposite and symmetrical directions.	2.	When preparing a tray of salad plates, hold plate in left hand and put lettuce on plate with right hand, etc; when counter space is limited both hands are involved by using left hand to bring food close to area for the right hand.
3.	Use natural rhythm with continuous curved motions.	3.	When washing a table top, surface of refrigerator, etc. use continuous curved movements and avoid using straight-line movements that stop and start.
4.	Use the smallest part of the body that produces the best results.	4.	Use the touch of a finger to start the garbage disposal.
5.	Use motions that are easiest for the worker.	5.	A right-handed person prefers to work with the right hand and arm and with the first and second fingers; a left-handed person prefers to work with the left hand and arm.
6.	Use tools or equipment to free hands and fingers.	6.	Use trip device on coffee urn spigot to free hands to hold cup and saucer.
7.	Use gravity to do work.	7.	Chop food item on a board near edge of sink and let the chopped pieces fall into a container in the sink.
8.	Arrange tools, equipment, and supplies within normal reach area.	8.	Place tools, equipment, and supplies neatly and in the normal reach area to avoid searching for needed equipment.
9.	Follow sequence of proper motion through location of tools and supplies.	9.	Arrange tools, equipment, and supplies in proper order for sequential use within normal reach area.
10.	Work at a comfortable height.	10.	Work surface should be 2 to 4 inches below the worker's elbow when worker is using a small hand tool, such as a paring knife.

Let's follow Susie while she carries out one of her jobs to see how motion conscious she is. She reads on the work schedule that she is to prepare the salad for the noon meal. The first item on the recipe card is lettuce, so she goes to the walk-in refrigerator, gets four heads of lettuce, takes them to the sink, and then returns to get four more heads of lettuce. The procedure she follows to remove the cores is to bend over the sink, pick up the lettuce in her right hand, transfer it to her left hand, pick up the knife, remove the core with her right hand, and put the head of lettuce on the drainboard.

Next Susie carries the lettuce, two or three heads at a time, to the salad area. After tearing the lettuce leaves into bite-size pieces, she looks at the recipe again. Carrots are listed as the next ingredient. Susie goes back to the walk-in refrigerator, picks up the carrots and walks to the sink. She then goes over to the drawer to get a French knife to peel the carrots and then slices them, one at a time, holding the carrots in her hands.

The next ingredient is celery. After going to the walk-in refrigerator for the celery and carrying it to the sink to mince it, she goes back to the drawer to get a paring knife to cut the celery into small pieces. She cuts one stalk of celery at a time and then picks up the pieces and puts them in the salad container.

What rules of work simplification and motion economy did Susie break? Refer to the information in this unit and see if you can catch her mistakes.

Were these the mistakes you found?

1. Susie wasted many steps collecting the ingredients and tools for the salad. If she had carefully read the recipe she could have taken a tray or large container to the refrigerator and picked up all the items in one trip. She could also have made only one trip to the drawer for knives if she had planned ahead. She needs to learn to "eliminate unnecessary steps" and to "assemble all supplies before beginning to work."

2. Susie violated Rule 1, "use hands in unison," when she changed hands so often while coring the lettuce.

3. Bending over the sink instead of putting the lettuce on a more comfortable working height, was a violation of Rule 10, "work at a comfortable height."

4. The use of a French knife to peel the carrots and her failure to put the carrots down on a cutting surface when slicing them was a violation of Rule 5, "use motions easiest for the worker." Using a French knife for peeling would be awkward and tiring and was not of the best tool for the job.

5. Use of a paring knife, instead of a French knife, to chop the celery was another violation of Rule 5 and another poor choice of equipment. Susie could also have used Rule 7, "use gravity to do work," if she had chopped the celery on a board near the edge of the counter and then pushed it into the salad container.

Susie's situation is exaggerated, but many workers waste motions without being aware that there is an easier, quicker way to do things. Think about the way you carry out your duties. Don't be an employee like Susie--make every motion count and you will not be so tired at the end of the work period.

QUESTIONS:

1. When Mr. Robinson talked with June about her job as a dietetic aide he discussed the two types of planning that are used to obtain good worker productivity. What are they?

   a.

   b.

2. What is work simplification?

3. Mrs. Mayes, the dietitian was explaining their duties to the new dietetic aides. She said, "Work simplification is one of the most valuable skills you can learn and apply to your job." What are the steps in work simplification?

4. At one of the meetings for new employees, Joe heard an industrial engineer say that, "One of the big enemies of production is fatigue." Then he discussed the two types of fatigue which all workers experience. What are they?

5. What does "work smarter, not harder" mean?

6. What is the result of using the rules of motion economy?

7. What are the three parts of every job?

   a.
   b.
   c.

8. Which rule of motion economy could be used by the dietetic aide to most efficiently perform the following?
   _____a. Arrange lettuce and peach halves on salad plates.
   _____b. Start garbage disposal.
   _____c. Wash surface of a refrigerator.

9. Today, Juan has been assigned to help prepare salads. The salads are a chef's salad, a gelatin salad, cabbage slaw, and potato salad. They should be completed and ready to serve in four hours. Which salad should be prepared first? Why? Which salad should probably be made second?

Place an X in the correct blank to indicate whether each statement is true or false.

10. A plan of work will help you accomplish more.
_____a. True
_____b. False

11. Each job can be simplified.
_____a. True
_____b. False

12. One should work at top speed in order to get more done.
_____a. True
_____b. False

13. Posture does not affect the use of energy in any activity.
_____a. True
_____b. False

14. Job training is not necessary; anyone can do the work of a dietetic aide.
_____a. True
_____b. False

15. Fatigue is an enemy of production.
_____a. True
_____b. False

16. Work simplification is the study of tasks and operations to determine the most efficient method of performance.
_____a. True
_____b. False

ASSIGNMENT:

I. Analyze one job you do at your training station. What rules of motion economy could you apply to the job? (Turn this assignment in to your teacher.)

GROUP WORK:

I. Working in small groups or pairs, choose one task that you perform daily at your training station. Analyze the way each of you performs this task. Study the methods used by each member of the group. Then using work simplification rules, suggest ways to save time and energy while performing the task.

UNIT VIII-1

FOOD PREPARATION

SUBJECT: Beverages

TASKS:
16. Prepare beverages.
17. Follow standard procedures for preparing a variety of foods.
18. Evaluate quality of food prepared.

OBJECTIVES: When you finish this lesson, you should be able to
a. describe procedures for making beverages
b. identify characteristics of quality beverages.

REFERENCES: Lewis, Dora S.; Peckham, Gladys, C.; and Hovey, Helen S. *Family Meals and Hospitality*. New York: Macmillan Publishing Co., Inc., 1972. pp. 240-247.

Cornelius, Ethelwyn G. *Food Service Careers*. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1974. pp. 142-144.

Hospital Research and Educational Trust. *Being a Food Service Worker*. Washington, D.C.: Robert J. Brady Co., 1967. p. 6.

COFFEE

Coffee is the most popular beverage in America. Coffee is served as an accompaniment to a meal either with the main course, with the dessert, or at the end of the meal. Coffee is also enjoyed as a special refreshment. Because coffee is such a popular beverage, the dietetic aide needs to understand and observe the principles for making a good cup of coffee.

The ability to make good coffee is simply a matter of using the right combination of equipment, cleaning the equipment properly, and measuring the water and the coffee accurately. Coffee should be served hot and fresh. It should be sparkling clear and have a pleasing taste and aroma.

Underbrewing causes the coffee to have an unpleasant flavor, lack body, and taste watery. Overbrewing results in a bitter taste and cloudy or muddy appearance. Warming-over coffee results in an unpleasant, bitter or oil taste.

Coffee used in food service is ground, instant, decaffeinated, freeze-dried, or a frozen concentrate. *Ground coffee* is available in regular, drip, and fine grind. Regular grind coffee is used for percolaters. The drip grind is recommended for drip and vacuum coffee makers; however, the fine grind may also be used for these coffee makers. *Instant coffee* is powdered coffee which readily dissolves in hot or cold water and requires no special preparation. *Freeze-dried coffee* is an instant coffee blend. It is easy to recognize because of its larger crystals. Freeze dried coffee is prepared the same as instant coffee. *Frozen coffee concentrate* comes in cans that are used with a special dispenser.

The dispenser heats the water to the correct temperature, proportions the hot water and the coffee concentrate, mixes and dispenses the coffee as needed. Decaffeinated coffee may be ground or instand. This coffee has coffee flavor, but it does not act as a stimulant because the caffeine has been removed.

In dietary kitchens, coffee is generally made in either a coffee urn or the vacuum coffee maker. Both of these types of coffee equipment are discussed in Unit V-3. Standard procedures for the preparation of coffee are given in the references.

TEA

Tea, the favorite beverage of the world, is the national beverage of the Middle East, the United Kingdom, and Asia. Tea is also a popular beverage in America. It is usually served as a hot or as an iced beverage. Tea can also be served spiced (sweetened and seasoned with orange and lemon rind, cinnamon sticks and cloves). In some nursing homes and child care centers, tea may be blended with fruit juices and other liquids for special occasions.

Tea is available for quantity preparation in various forms, such as bulk or loose tea leaves, individual tea bags, gallon-size tea bags, and instant tea. Bulk tea (tea leaves) must be measured and placed in a cheese cloth or tea ball. The standard portion to use is one ounce of tea to one gallon of boiling water. Gallon-size tea bags may be used in place of bulk tea for quantity preparation. The individual tea bag may be used by the customer with boiling water to make one or two cups of tea. Instant tea is a powdered tea which requires no special preparation and can be made with hot or cold water.

The accepted standards for tea are that it be clear, mild in flavor, and free from tea leaves. Good tea may be attained by using clean equipment and by the use of the appropriate amount of tea for the amount of water.

Tea is made by pouring boiling water over tea leaves or bags and allowing it to steep (soak) from three to five minutes. Tea that is very strong may be cloudy; however, when cold water is added it becomes clear. Tea should not be boiled since boiling makes it bitter. Equipment used in the preparation of tea is discussed in Beverage Equipment, Unit V-3.

COCOA AND CHOCOLATE

Cocoa and chocolate are popular beverages and can be served as an accompaniment to a meal or as a special refreshment. They can be served hot or chilled. Since cocoa and chocolate are made with milk, they contribute important nutrients to the daily diet. Directions for the preparation of cocoa and chocolate are given in the references.

MILKSHAKES

Milkshakes are frequently served to patients in health care institutions to increase calorie intake, to help balance the patient's diet and to increase nourishment periodically when the patient is not able to eat regular foods.

The standard milkshake may be varied according to the results desired. An egg or non-fat dry milk solids may be added to the standard milkshake to provide additional nutrients and calories.

Satisfactory methods for making milkshakes include the use of the electric blender, electric mixer, or a shaker. If this type of equipment is not available, the ingredients may be combined and beaten with a rotary egg beater. Milkshakes are best served cold. Ice should not be added because this will dilute the ingredients. If milkshakes must be prepared in advance, they should be stored in the refrigerator and stirred before serving.

SUSTAGEN

Sustagen is a nourishment given either orally or by tube to sick patients. It is high in calories, protein, vitamins, and minerals, and it is bland and nonirritating.

Two dilutions of Sustagen are most commonly used. The more concentrated dilution requires equal amounts of Sustagen and water. It is recommended for oral use and for intermittent tube feedings by syringe or flask. The less concentrated dilution is made using twice as much water as Sustagen and is used for continuous drip tube feeding.

Sustagen is easy to prepare. If large amounts are needed, the measured Sustagen powder is placed on the surface of the required amount of liquid and allowed to stand until it is moistened. Then it is mixed with a mechanical mixer or an egg beater until smooth. The bubbles should be allowed to disappear before it is used. Small amounts of Sustagen can be prepared in a shaker.

When Sustagen is properly prepared, it will not need straining. If, however, lumps occur due to hasty mixing, they should be strained out prior to tube use.

Sustagen should be stored in the refrigerator. It should be stirred before tube use if it has been refrigerated very long.

QUESTIONS:

1. A good cup of coffee requires, among other things,
   _____a. level standard measurements.
   _____b. heaping measurements.
   _____c. a person who estimates well.

2. Boiling water should be poured over the coffee grounds with a
   _____a. quick, up and down motion.
   _____b. slow, back and forth motion.
   _____c. steady, circular motion.

3. Coffee in the urn should be held at a temperature of
   _____a. 212° F. (100° C.).
   _____b. 185° F. (85° C.).
   _____c. 140° F. (60° C.).

4. The lower bowl of the vacuum coffee-maker is filled to the correct level with
   ______a. fresh, cold water.
   ______b. boiling water.
   ______c. carefully measured coffee grounds.

5. a. What are the results of underbrewing coffee?

   b. Overbrewing coffee?

6. Accepted standards for tea are

   a.
   b.
   c.

7. How is tea affected by boiling?

8. Describe the procedure for making tea.

9. Accepted standards for cocoa and chocolate beverages are:

   a.
   b.
   c.
   d.

10. What are the three reasons for serving milkshakes to patients?

   a.
   b.
   c.

11. What kinds of equipment can be used in the preparation of milkshakes?

12. Should ice be added to fruit or vegetable juices for serving? Why?

ASSIGNMENT:

I. Compare the methods for making coffee, tea, cocoa, milkshakes, and sustagen at your training station with procedures described in references. Check to see if you can improve the way you prepare beverages.

GROUP WORK:

I. View a film which stresses the importance of coffeemaking in the health care establishments. Compare the brewing procedures illustrated in the film with the procedure followed at your training station.

II. In small groups, prepare posters illustrating the accepted standards for coffee, tea, cocoa, chocolate, and milkshakes. (Each small group illustrates standards for one beverage). Display the posters on a bulletin board.

UNIT VIII-2

FOOD PREPARATION

SUBJECT: Sandwiches

TASKS:
17. Follow standard procedures for preparing a variety of foods.
18. Evaluate quality of food prepared.

OBJECTIVES: When you finish this lesson, you should be able to
a. describe procedures for making sandwiches
b. identify characteristics of quality products.

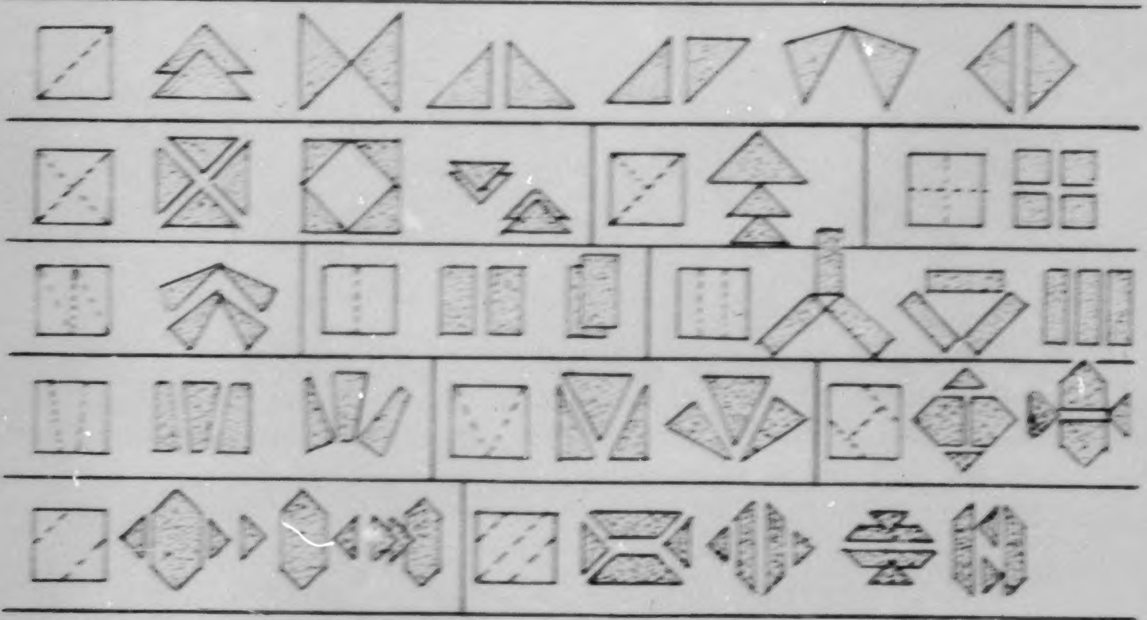
REFERENCE: Cornelius, Ethelwyn G. Food Service Careers. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1974. pp. 134-137.

Lewis, Dora S.; Peckham, Gladys C.; and Hovey, Helen S. Family Meals and Hospitality. New York, New York: Macmillan Publishing Co., Inc., 1972. pp. 127-132.

The sandwich is one of the most popular food items in America. Sandwiches are served hot or cold, with or without gravy or sauce. They may be open faced, closed, grilled, rolled, or multi-layered. Sandwiches are made of regular or speciality breads and may be filled, spread, or covered with a variety of items from meats and cheeses to jams, jellies, and speciality spreads. They may be offered at intervals as an entree to add variety to cycle menus or served as between meal snacks.

Serving Sandwiches

Sandwiches may be cut in a variety of shapes. The cut sandwiches should be arranged attractively on the serving plate. Ways to cut sandwiches and arrange them in an eye-appealing manner are shown below.



QUESTIONS:

Connie is employed at a health care establishment. Her supervisor has assigned her to the sandwich-making area. Let's follow her through her first day's activities and see if you can answer her questions.

1. Before Connie started work her supervisor gave her some hints about the quality expected. What would her supervisor have told her about the following?
   a. What should be included with sandwiches containing soft fillings?
   b. How much filling is a standard size portion for a sandwich?
   c. What suggestion might her supervisor have given her about spreading fillings in relation to the edge of the sandwich?
   d. What would she tell Connie about the cut edges of the sandwiches?
   e. What could be done to prevent the filling from soaking into the bread?
2. As Connie observed her co-worker spreading the filling on bread, she noticed the spreading motion used was ______________________________.
3. After the sandwiches were made, Connie had the following questions:
   a. How high could she stack them for cutting?
   b. What should be used to cover unwrapped sandwiches that need to be refrigerated for storing?
4. List the qualities of a good sandwich.
   a.
   b.
   c.
   d.
   e.

ASSIGNMENT:

I. If you work in the sandwich area, write out the procedure you now use. What can you do to improve your work methods? Time yourself using the method you now use and then try the new plan you work out. Report the results of your experiment to your teacher and to your training sponsor.

GROUP WORK:

I. View a filmstrip showing how to make and wrap sandwiches by hand or machine. Discuss the differences and similarities in the techniques shown in the filmstrip and those used at your training station.

II. Form small groups and prepare a demonstration for the class showing how to prepare and wrap sandwiches in quantity. Be sure to point out ways to simplify and speed the preparation.

UNIT VIII-3

FOOD PREPARATION

SUBJECT: Cereals

TASKS:
17. Follow standard procedures for preparing a variety of foods.
18. Evaluate quality of food prepared.

OBJECTIVES: When you finish this lesson, you should be able to
a. list different types of cereals
b. identify characteristics of standard products.

REFERENCES: Lewis, Dora S.; Peckham, Gladys C.; and Hovey, Helen S.; Family Meals and Hospitality. New York, New York: Macmillan Publishing Co., Inc., 1972. pp. 209.

Hospital Research and Educational Trust. Being a Food Service Worker. Washington, D.C.: Robert J. Brady Co., 1967. p. 10.

QUESTIONS:

1. List five types of breakfast cereals which require cooking.
   a.
   b.
   c.
   d.
   e.

2. How can lumps be prevented from forming when cooking cereals?

3. How can the cereal be prevented from sticking to the container in which it is prepared?

4. List four characteristics of well-cooked cereals.
   a.
   b.
   c.
   d.

5. Outline two methods for cooking cereals.
   a.

   b.

ASSIGNMENT:

I. Identify the method(s) used to prepare cereals at your training station. List the steps in each method. Study these methods to be able to prepare quality products.

GROUP WORK:

I. Form small groups and prepare a demonstration for the class showing how to prepare cooked cereals. Discuss the differences and similarities in the techniques shown in the demonstration and those used at your training station.

UNIT VIII-4

FOOD PREPARATION

SUBJECT: Egg Cookery

TASKS:
17. Follow standard procedures for preparing a variety of foods.
18. Evaluate quality of food prepared.

OBJECTIVES: When you finish this lesson, you should be able to
a. describe procedures for preparing eggs
b. identify characteristics of quality products.

REFERENCES: Cornelius, Ethelwyn G. *Food Service Careers*. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1974. pp. 126-127.

Hospital Research and Educational Trust. *Being a Food Service Worker*. Washington, D.C.: Robert J. Brady Co., 1967. Ch. 19, pp. 5-7.

Lewis, Dora S.; Peckham, Gladys C.; and Hovey, Helen S. *Family Meals and Hospitality*. New York, New York: Macmillan Publishing Co., Inc., 1972. pp. 225-228.

QUESTIONS:

1. At what temperatures should eggs be cooked? Why?

2. List the qualities of well-cooked scrambled eggs.

3. Describe three methods for preparing hard cooked eggs.

   a.
   b.
   c.

4. How can the darkening of the surface of hard cooked egg yolks be prevented?

5. Describe the preparation of poached eggs.

ASSIGNMENT:

I. List the methods used most frequently at your training station to prepare eggs. List the steps in each method. Study these steps so that you are able to prepare quality products.

GROUP WORK:

I. Form small groups and make posters showing standards for various preparation methods for eggs. Use the posters as a bulletin board.

UNIT IX-1

FUNDAMENTALS OF FOOD SERVICE PROCEDURES

SUBJECT: Dining Room Service for Nursing Homes

TASK: 19. Perform dining room service.

OBJECTIVE: When you finish this lesson, you should be able to
a. explain the value of an attractive, orderly, and appropriate dining room service.

In many situations, moderately disabled older people improve after entering a nursing home. Administrators in nursing homes agree that this improvement is often the result of improved diet, improved morale, and increased interest in personal appearance. Dining room service, in contrast to tray service, helps the patient feel that he is part of the group and gives him an opportunity for increased sociability. If the patient is not confined to bed, dining room service in a group setting helps him accept food that he might not ordinarily eat when dining alone.

The atmosphere of the dining room is important. An attractive room, that is quiet, clean, colorfully decorated, and well lighted encourages a good appetite. Tables should be arranged so that an elderly person can get to his chair easily. The table setting should be attractive and orderly. The utensils and china used should be clean and free from cracks and chips.

The attitude and appearance of the serving personnel plays an important part in encouraging the patient to eat. The dietetic aide should be pleasant and have a neat, clean appearance.

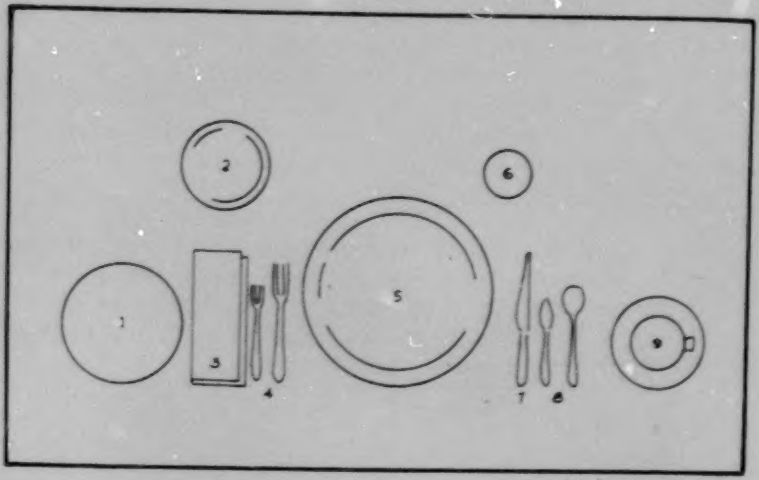
In the nursing home, four types of food service may be used. These are modified cafeteria service, family style, tray service, and table service.

Modified Cafeteria Service. This type of service may be used effectively for patients who are physically and mentally capable of making certain food selections and carrying their trays. This method gives the patient the personal satisfaction of knowing that his food preferences are considered and that he is still capable of taking care of his needs.

Family Style Service. For the patients who have the mental and physical capacities to select their food and share in the service, family style meals might be served. One outstanding feature of this type of service is food economy because the patient knows which foods he will eat and the size servings he desires. With this type of service, residents are not as hesitant about asking for second helpings, and they are more likely to be inspired to eat foods they would refuse when eating alone. On the other hand, the overweight patient or the patient on a restricted calorie diet is likely to overeat when family style service is available.

Tray Service. Patients who are unable to leave their rooms for meals are provided tray service in their rooms. It is important that each patient receives the correct tray of food for his particular diet and that the food is served at the appropriate temperature.

Table Service. For those who are able to eat at the table, table service offers companionship at mealtime. Plates are served in the kitchen and brought to the table by the dietary personnel. The following diagram is a sample place setting for this type of service. The place setting may be modified according to the menu. Modified eating utensils, such as combination forks and spoons, may also be used for some patients who have little strength in their hands and fingers.



1 SALAD PLATE
2 BREAD-AND-BUTTER PLATE
3 NAPKIN
4 FORKS
5 DINNER PLATE
6 WATER GLASS
7 KNIFE
8 SPOONS
9 CUP AND SAUCER

QUESTIONS:

1. Name four types of food service which may be used in nursing homes.

   a.

   b.

   c.

   d.

2. What is the difference between table service and family style service?

3. What is the disadvantage of serving family style meals to persons who are overweight?

4. What are five reasons for using dining room service in preference to tray service for ambulatory patients?

   a.

   b.

   c.

   d.

   e.

5. List two specific advantages of using modified cafeteria service for aging or moderately ill patients.

   a.

   b.

ASSIGNMENTS:

I. Identify the type of food service(s) used at your training station. Draw a cover(s) showing the correct placement for china and silverware. List any modified eating utensils provided for the patients.

II. Develop a checklist including points on personal appearance and attitude for serving personnel. Use the checklist to evaluate yourself. Make a list of specific things you need to improve. Turn the list into your teacher. In a week, evaluate yourself again and report your progress to your teacher.

GROUP WORK:

I. Form groups and discuss the different types of food service used at the various training stations represented. Use the drawing from Assignment I to illustrate your explanation.

UNIT IX-2

FUNDAMENTALS OF FOOD SERVICE PROCEDURES

SUBJECT: Tray Line Assembly

TASKS:

20. Assist in setting up tray assembly line for serving.
21. Prepare such items as silverware, napkins, and glassware for tray line.
22. Examine filled trays for conformance with menu and diet regulations.
23. Designate trays with name and room number for delivery to patients.
24. Place food on a portable cart and on trays in such a way that foods remain at the correct temperature.

OBJECTIVES: When you finish this lesson, you should be able to

- a. list the duties on a tray assembly line
- b. relate the skills in work simplification techniques which pertain to tray line assembly
- c. identify the procedures for tray service
- d. evaluate trays in terms of standards for tray service.

REFERENCE: Hospital Research and Educational Trust. *Being a Food Service Worker*. Washington, D.C.: Robert J. Brady Co., 1967. Ch. 15, pp. 1-4.

When organizing the dietary department in the hospital or private nursing home, one must carefully organize the tray line assembly. Because foods should be at the appropriate temperature when served to patients, trays should be assembled quickly and accurately and sent out immediately in assembly-line fashion.

The dietetic aide may rotate with other employees by performing one or more of the following job assignments on the assembly line:

1. Setting up trays for patients' food by following posted or individual menu instructions accurately.
2. Setting up the serving line with cold foods, condiments, serving containers, dishes, silver, and other items appropriate for the food to be served.
3. Working the hot or cold station on the central tray-service line.
4. Placing the appropriate food on general and modified diet trays.
5. Delivering the loaded food cart to the patient area and checking to be sure that name and room number cards are on the tray.
6. Delivering the trays to designated areas and picking up each patient's tray to be returned to dietary kitchen.

One person is usually responsible for checking all trays to insure that the setup is complete and that the food is served according to specifications. This task is one of the most important because it is essential that the specified amounts and types of foods have been placed on the tray. Even a small error could be dangerous to a patient.

Work simplification techniques can be used in tray line assembly to eliminate unnecessary motions and wasted energy. If you have not already studied Unit VII-5 you should do so to learn how these techniques can make your job easier.

STANDARDS FOR TRAY SERVICE

Principles of tray service. As in all other food service operations, care should be taken to insure that when each patient receives his food it is:

1. Attractive
    - A. Tray cover is spotless and suitable for the size of the tray.
    - B. Size of the tray and dishes are in relation to the size of the meal being served.
      (For example: a glass of milk by itself on a large tray looks lost.)
    - C. Flatware, tableware and glassware are spotlessly clean. Tableware and glassware must be free of chips or cracks.
    - D. Colors of all accessories on the tray harmonize and create a pleasing effect.
    - E. Food portions are neatly and attractively arranged on plates and in dishes and bowls.
2. Palatable
    - A. Trays are served to patients promptly with hot foods hot and cold foods cold.
    - B. If delays are necessary, precautions must be taken to insure that food is of high quality when it is delivered to patients.
3. Meets expectations of patients
   Food is arranged on plates in a consistent order. This enables those who check trays to see quickly whether all items called for on the diet are provided.

A person who is ill is not usually very interested in food. He is likely to be more particular about his food and more critical of the service than he would be under normal circumstances. For these reasons, the food and the tray on which it is served should be prepared and arranged in an attractive and orderly manner. The appearance of the food on the tray may influence the patient's acceptance or rejection of the food. The amount and size of the food servings which the patient receives are determined by instructions from the dietitian, with some consideration for the patient's likes and dislikes. Three steps are essential in preparing the patient's tray and should be completed in a routine order. These steps include: (1) setting up the tray, (2) serving cold foods, and (3) serving hot foods.

Setting up the Tray. In setting up the trays for the patients, one of several methods may be used, depending upon the organization of the dietary department in which one is working. The following items are placed on the tray regardless of the tray assembly method used:

1. Tray cover (liner)
2. Tray card
3. Napkin
4. Salt, pepper, and sugar, if used (these items may be packaged)
5. Cup and saucer or beverage glass
6. Bread and butter plate (if used)
7. Silverware (may be sacked)
8. Cold foods
9. Hot foods

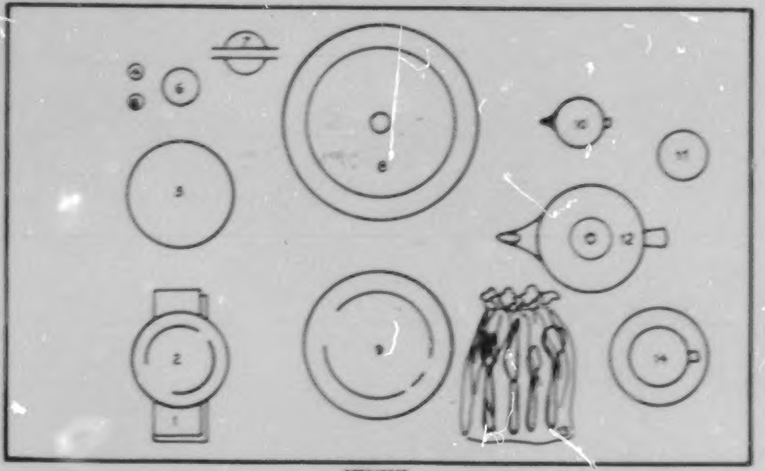
The tray card should give the following information:

1. Patient's name and room number
2. Type of diet or special foods

Serving Cold Foods. Some examples of cold foods which are included in tray assembly are cream, milk, bread, butter, salad, dessert, fruit juice, and fruit. These should be served so that an attractive appearance, proper temperature, and maximum sanitation are maintained. Methods of cold food service vary.

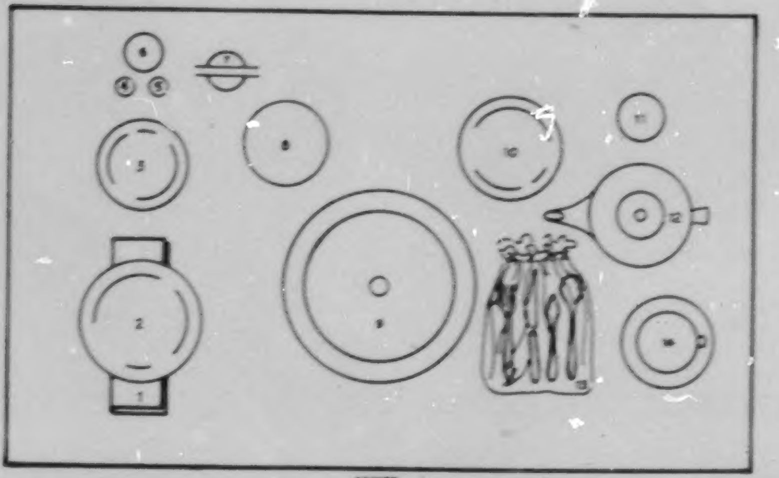
Serving Hot Foods. Hot foods for tray service may include soups, main courses, vegetables, and some beverages. Hot foods should be served at temperatures from 175° - 180° F. (79.4° - 82.2° C.). To maintain proper food temperatures, plate covers and dishes should be preheated. A more commonly used method of maintaining correct temperature in tray service is the thermally-heated, vacuum sealed container.

The diagrams below show typical breakfast and dinner place settings for nursing home or hospital tray service.



BREAKFAST

1 NAPKIN
2 BREAD-AND-BUTTER PLATE
3 CEREAL BOWL
4 SALT
5 PEPPER
6 SUGAR
7 TRAY CARD HOLDER
8 MAIN PLATE WITH COVER
9 FRUIT PLATE
10 CREAMER
11 MILK
12 BEVERAGE POT
13 FORK, KNIFE, SPOONS
14 CUP AND SAUCER



DINNER

1 NAPKIN
2 SALAD PLATE
3 BREAD-AND-BUTTER PLATE
4 SALT
5 PEPPER
6 SUGAR
7 TRAY CARD HOLDER
8 VEGETABLE DISH
9 MAIN PLATE WITH COVER
10 DESSERT PLATE
11 MILK
12 BEVERAGE POT
13 SACKED SILVERWARE
14 CUP AND SAUCER

QUESTIONS:

1. Why is it important that the tray assembly line be carefully planned?

2. Name six job responsiblities which may be assigned to the dietetic aide in the tray assembly line.

   a.

   b.

   c.

   d.

   e.

   f.

3. Lucy wanted to be sure Mrs. Smith's tray was complete. Name the items that should be on the tray.

   a.

   b.

   c.

   d.

   e.

   f.

   g.

   h.

   i.

4. Mary Lou was asked to set up a liquid nourishment tray for the patient in Room 303. Should she use a large or small tray? Why?

5. Mrs. Jones, the dietitian, told John to check the tray cards for accuracy and completeness. John should check to see that each tray card contains the following information:

   a.

   b.

   c.

6. List the three steps in preparing for tray service.

   a.

   b.

   c.

7. From the following menu, make a diagram of the serving tray and use the number preceding the food to locate it on the diagram:

(1) Tomato Juice
(2) Roast Pork (3) Gravy
(4) Baked Sweet Potato
(5) Green Beans
(6) Cole Slaw
(7) Rolls (8) Margarine
(9) Caramel Custard
(10) Coffee

8. The tray in Question 7 should contain eight items in addition to those listed. What are they?

9. Give at least five examples of foods which may be served cold.

10. At what temperature should hot foods be served?

ASSIGNMENTS:

I. Identify and describe the type of food distribution system used at your training station.

II. Draw a diagram of the tray set-up used at your training station.

III. Describe the method used at your training station to specify various diets patients are to be served.

GROUP WORK:

I. Compare the type of food distribution system used at your training station to those used at other training stations.

UNIT IX-3

FUNDAMENTALS OF FOOD SERVICE PROCEDURES

SUBJECT: Food Distribution to Patients

TASKS:
25. Carry loaded trays or push serving cart between kitchen and serving areas.
26. Deliver loaded food carts and trays to patient areas, nursing stations, or dining rooms.
27. Pick up food carts and empty trays from patient areas, nursing stations, or dining rooms.

OBJECTIVES: When you finish this lesson, you should be able to
a. differentiate between centralized and decentralized food service procedures
b. describe methods used to keep foods at proper temperatures.

REFERENCE: Hospital Research and Educational Trust. *Being A Food Service Worker*. Washington, D.C.: Robert J. Brady Co., 1967. Ch. 15, pp. 5-7; Ch. 16, pp. 1-7; and Ch. 13, pp. 3-5.

When you deal with people who are confined, as in a hospital or nursing home, your attitude is very important. When you serve meals, you may be told in very uncomplimentary terms what a patient thinks of the food you have brought and the way it was served. It is important that you understand some possible reasons behind these complaints. Often people in these situations feel lonely, uncomfortable, frightened, or neglected. Do not take the complaint personally. Try to stay calm and cheerful. If a patient complains about the food, it is better if you neither agree nor disagree. "I'm sorry" is the only response needed. If the patient says he cannot eat a certain food, do not argue with him. The dietetic aide might either ask the dietitian to have someone visit with the patient about his diet or make notes on a card and turn it in to the dietitian.

Do not make a promise you cannot fulfill. This can make a patient angry and upset. A patient in a hospital or nursing home is a customer and should be treated as one.

Another situation which you might encounter in serving a patient in a room is an improper advance or use of foul language by the patient. If at all possible, ignore the remark while you continue the task you were performing, such as removing the patient's tray. If the comment cannot be ignored, calmly leave the room. Check with your supervisor for further instructions. If the patient is mentally unbalanced, the supervisor may feel that his behavior is beyond the ability of a young person to handle.

METHODS OF TRAY DISTRIBUTION

In both tray assembly and distribution, each employee has a definite job which insures that the food reaches the patient at optimum quality. The method of handling tray distribution to patients is dependent primarily on the physical layout of the hospital or nursing home. The two common classifications of tray distribution are centralized and decentralized. When the food is served on the trays in the same general area in which it is prepared, it is called "centralized food service." "Decentralized food service" means that the prepared food is taken in bulk to the area where it is to be distributed. Individual trays are prepared for patients in this area.

Both methods require an organized tray assembly technique. Portable carts are used to speed delivery of the patients' trays from the dietary department.

Specialized equipment which has been developed in order to reduce the problems of delivering food to patients includes:

1. Bulk food trucks -- These are really portable hot food tables. They are used in a hospital or nursing home that has decentralized food service. Before each serving period, the trucks are plugged into outlets in the kitchen to bring the food compartments to the proper temperature. The food is put into removable containers and the truck is moved to the patient area. Here it is plugged in again, and the food is placed on individual trays for the patients.

2. Mobile Cafeteria -- The mobile cafeteria is another type of decentralized food service. It is more elaborate and larger than the bulk food trucks. The mobile cafeteria has both heated or refrigerated compartments. In addition, it carries all the necessary eating and serving equipment. A mobile cafeteria can serve up to 100 patients per meal. The patient orders his meal directly from the cart. He is able to specify the size portions he desires, which cuts down on food waste. His food is also served to him at the appropriate temperatures. Another advantage is that the mobile cafeteria operates with fewer personnel; it, therefore, eliminates the necessity of space for a floor kitchen.

3. Electronic ovens -- In another type of decentralized service, food is prepared in a centralized kitchen, frozen, and then thawed and heated by electronic ovens in a floor kitchen. This type of service is used by "chain" hospitals and nursing homes where the hot foods are prepared in one kitchen and transported by refrigerated trucks to other hospitals or nursing homes.

4. Insulated trays -- These are used in many hospitals which use a centralized food service. They are made so that they stack well on top of each other and have disposable liners for food.

5. Individual insulated containers -- These are frequently used in both types of food service operations for such food items as coffee and ice cream.

There are other systems which are used in institutions. The physical layout of an institution and the types of residents determine the best type of food service operation.

It is important that food be distributed both accurately, according to the patients' diets, and rapidly. No equipment can correct the deterioration of food quality when it is allowed to sit too long before being distributed or when it is cooked too long before serving.

To assure that patients receive correct diets, many hospitals use cards of different colors for different types of diets. It is the responsibility of each person filling patients' trays to know the type of diet indicated by each card and to follow its instructions exactly.

When moving trays or large mobile units, use safety precautions in patient areas. Avoid unnecessary loud talk or banging of dishes and other equipment. Loud talking can upset patients. Banging equipment can upset patients as well as cause damage to the equipment itself.

Many of the qualities of a waiter or waitress are needed by a dietetic aide who delivers trays to patients. If this is one of your responsibilities, see Unit XII-4 in Food Service Employee.

QUESTIONS:

1. The two general types of food distribution to patients are ______________ ____________________ and ___________________________. Briefly explain each.

2. What is a bulk-food truck?

3. What is the main disadvantage of decentralized service?

4. What are four advantages of the mobile cafeteria over the standard decentralized service?

   a.

   b.

   c.

   d.

5. Which of the following are characteristics of centralized food service?
   ______a. Hot foods are hot and cold foods are cold when served.
   ______b. Trays are served in the floor kitchen.
   ______c. The food may become over-cooked and dried out before it is served.
   ______d. The food is handled only once.
   ______e. Complete supervision of tray preparation is in one area.
   ______f. All trays are prepared in one area.

6. Name two methods used to distribute the food in centralized service.

   a.

   b.

7. Explain briefly the steps in using thermally-sealed, insulated containers.

8. Is any one system of food distribution best? Why or why not?

9. Give two reasons for noting uneaten food left on trays by patients during tray pickup.

   a.

   b.

10. Give two reasons for the use of disposable service for isolation patients.

   a.

   b.

ASSIGNMENTS:

I. Describe the food distribution procedures used at your training station. What are some of the advantages and disadvantages of this method?

II. Outline the procedures used at your training station for each of the following:
   a. serving delayed trays.
   b. handling guest trays.
   c. serving patients in isolation.

GROUP WORK:

I. Form groups and discuss and compare the procedures outlined in assignments I and II.

II. Make posters or a bulletin board showing appropriate behavior for the dietetic aide on patient floors.

III. Role play situations showing first poor and then improved interaction between the dietetic aide and patients and between the dietetic aide and members of the nursing staff.

UNIT X-1

SAFETY

SUBJECT: Safety Precautions

TASK: 28. Use precautions necessary to avoid accidents in food preparation.

OBJECTIVES: When you finish this lesson, you should be able to

a. evaluate yourself in terms of rules of safety applied on the job
b. identify potentially hazardous conditions.

REFERENCE: Cornelius, Ethelwyn, G. Food Service Careers. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1974. pp. 301-310.

Dietetic aides who are aware of the discomforts and waste resulting from accidents help others as well as themselves to develop safe work habits. Careless attitudes toward "safe" practices among employees may be classified into three general groups:

1) Those who do not understand the dangers in their unsafe acts.
2) Those who do not take necessary precautions.
3) Those who are physically defective in eyesight, hearing, or muscular control.

Accidents result from unsafe acts or unsafe conditions. An injury always results from one or a combination of these factors. Injuries due to unsafe conditions can be definitely and permanently eliminated. On the other hand, unsafe acts involve human beings and are never entirely eliminated. Unsafe acts which cause accidents are often a result of failure to follow instructions, to use equipment properly, to control your temper, or to rest adequately. Have you failed in any of these?

The dietetic aide must develop special attitudes as well as skills to do his job the safest way without stopping to think about it. Make safe work procedures a habit. Three simple steps which help in establishing safety habits are:

1) Start the job right by learning safe habits.
2) Practice the right habits.
3) Never fall back into old habits of carelessness.

In dietary kitchens, the most common accidents are cuts, burns, falls, and injuries resulting from fires and explosions. Because food preparation and service involve the use of glass, hot liquids, sharp instruments, power-operated equipment, and hot cooking surfaces, employees constantly work under hazardous conditions.

When an employee is seriously injured, the result is pain, suffering, and lost job time. This means lost income! So, remember, your own safety is up to you!

SAFETY PRECAUTIONS

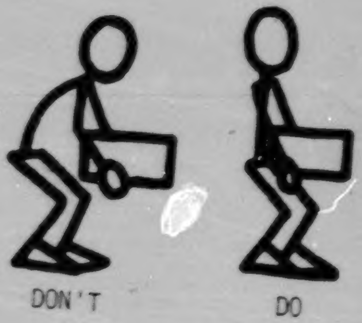
To Prevent Electrical Shock:

1. See that electric cords are in good repair.
2. Always dry your hands before touching electrical equipment.
3. When plugging in anything electrical, plug the cord into the equipment or appliance first, and then into the electric outlet. When removing the plug, reverse the order: remove the plug from the electric outlet first; then remove the plug from the appliance.
4. Be extra careful when using anything electrical near water.

Refer to Food Service Careers for other safety precautions to prevent slips, falls, cuts, burns, fires, and strains.

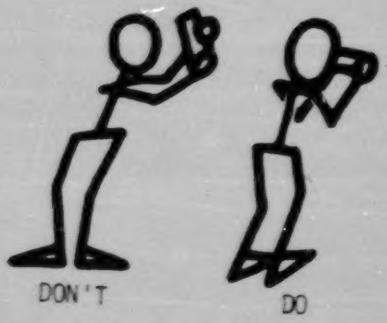
BODY MECHANICS

Lifting heavy containers of food or ingredients may lead to injuries if the lifting is not done correctly. To lift the right way, place your feet about twelve inches apart, squat close to the object to be lifted, keep your back as straight as possible, and lift by pushing up with your leg muscles.



While carrying objects, keep the load close to the body. Never carry loads so high that vision is blocked. Put the load down by reversing the procedure used to lift it.

If a task requires turning from one direction to another, be sure to turn, not twist, your body. Constant twisting pulls the back muscles and may strain them. Pivot with your feet and turn.



WHAT TO DO IN CASE OF ACCIDENTS

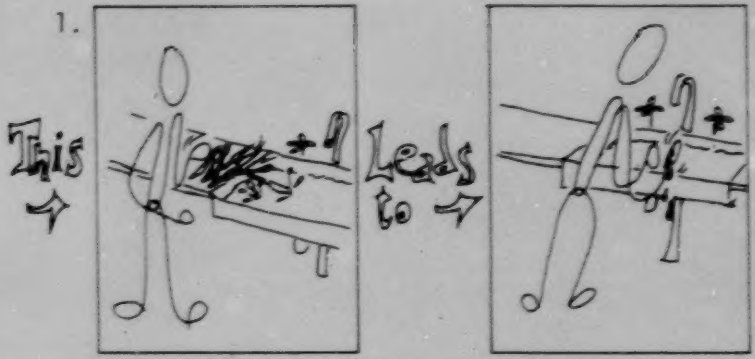
When an employee has an accident, he should receive immediate care. First, the accident should be reported to the supervisor, who will probably send the employee to the first aid station; or if the accident is serious, he will probably send the employee to a doctor or call an ambulance. Small cuts, burns, or bruises should be cared for immediately.

An employee may leave his work station to find first aid, if necessary. The dietetic aide should do his part to guard against accidents, but in case an accident occurs, he should seek aid for any type of injury suffered.

QUESTIONS:

What safety precaution is illustrated in each of the following diagrams?

1.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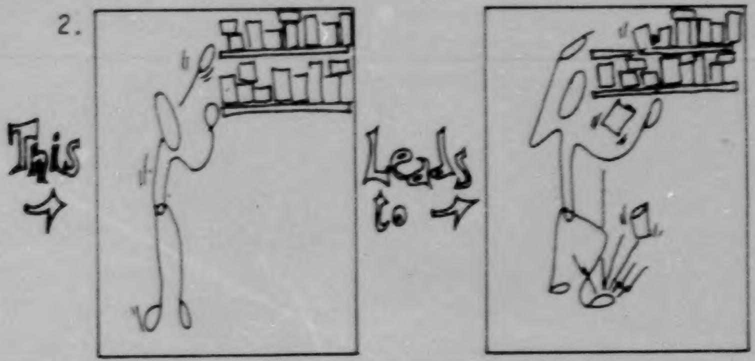
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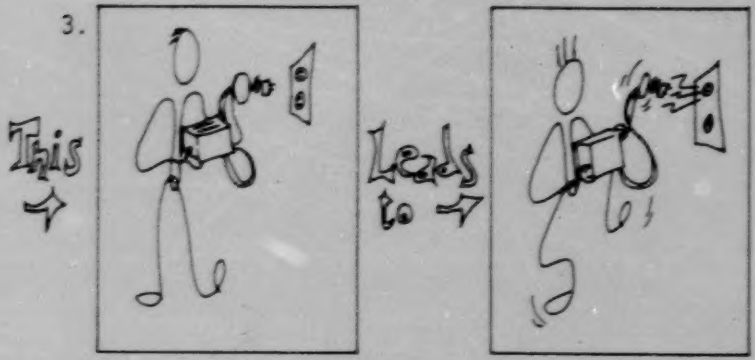
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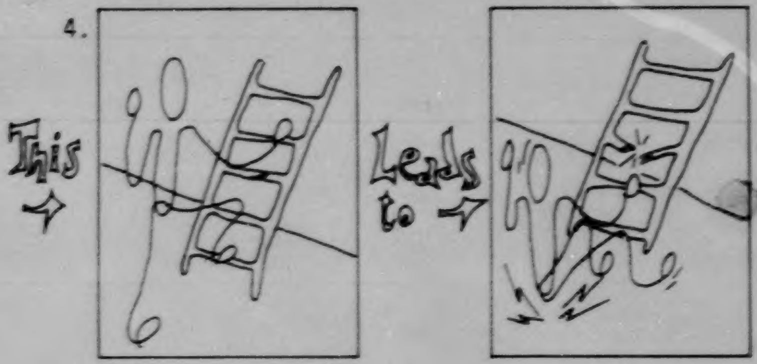
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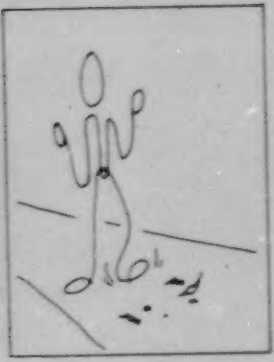

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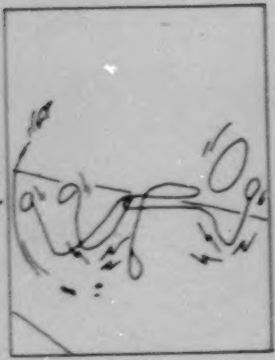

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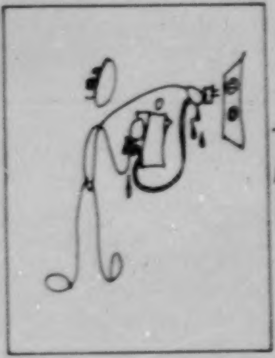

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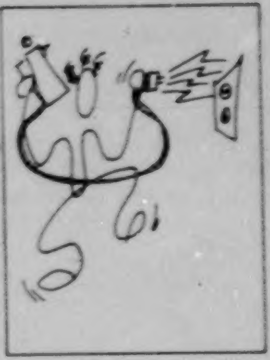

7.

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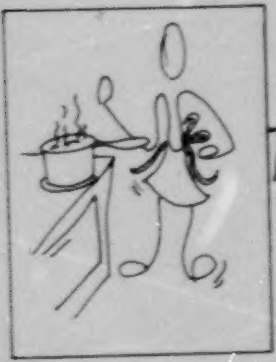

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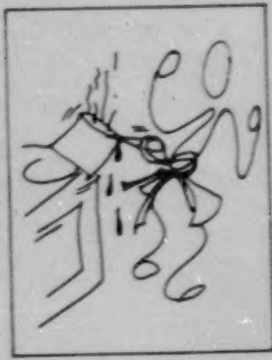

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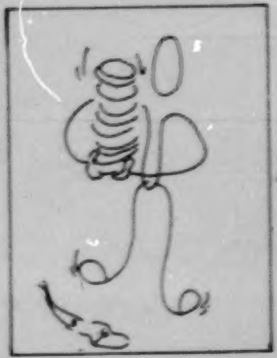

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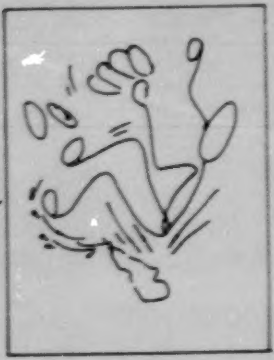


9. The steps in establishing safety habits are ______________________________,
______________________________, and ______________________________.

10. Built-in safety features are ____
____
____.

11. "Accident-prone" refers to ____
____.

12. The most common accidents in dietary kitchens are ____________________,
____________________, ____________________, and ____________________.

13. Weariness from labor or exertion affects safety; this weariness is called
______________________________.

ASSIGNMENTS:

I. Make a check list of the safety precautions that might be useful to you at your training station. From observations in your work area, add other precautions to your list which apply specifically to your work.

II. Make safety posters identifying potentially hazardous conditions in the food preparation and service areas. Display posters during National Safety Week.

III. Locate first aid supplies in or near your training station. Learn how to use first aid supplies for small cuts, burns, and bruises. Who should you notify at your training station when a serious accident occurs?

IV. Write to the United States Department of Labor, to the Occupational Safety and Health Administration in Washington or to the local Health, Education and Welfare office for a copy of the Williams-Steiger Occupational Safety and Health Act of 1970 (This act is also known as OSHA). Prepare a report to present to the class on the purpose of this act. In the report include information on violations, fines, inspections, and standards for occupational safety and health.

GROUP WORK:

I. In small groups, role play situations demonstrating good and poor safety habits. Example: One person role plays as the narrator says, "If Molly follows this procedure, she may ...."

II. Demonstrate the correct way to lift a heavy carton.

UNIT X-2

SAFETY

SUBJECT: Fire Safety

TASK: 29. Apply appropriate emergency procedures.

OBJECTIVES: When you finish this lesson, you should be able to
a. identify kinds of fires
b. explain fire emergency procedures
c. describe correct use of fire extinguisher.

Serious fires occur so often in dietary kitchens that every employee should understand fire safety and know what to do in case of a fire. Injuries often occur because people panic or become confused.

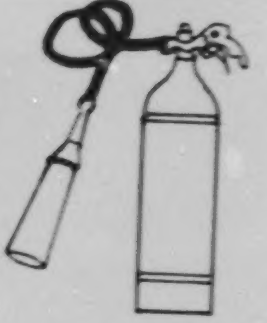
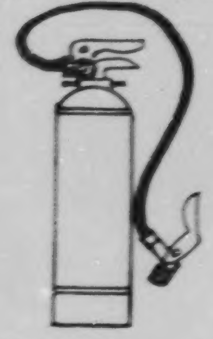
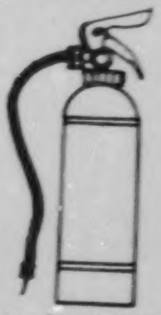
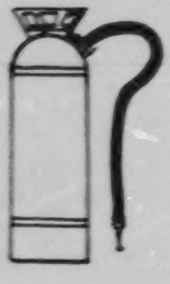
Fire safety is the responsibility of each employee. All employees should become familiar with the rules to follow in case of fire in their place of employment. Employees should also know the location of all exits in the areas where they work. Knowing where the nearest fire extinguisher is located and knowing how to operate it saves precious minutes when a fire occurs.

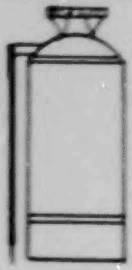
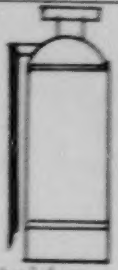
If a fire occurs, follow the emergency fire procedures for the place where you are employed. Pull the nearest fire alarm box. Alert other employees and assist them to safety. Report to the fire department the exact location and type of fire.

The most common places fires occur in dietary kitchens are in or around deep fat fryers, ranges, and broilers. Thoroughly cleaning these pieces of equipment helps to prevent fires. A container of baking soda, easily accessible, enables the cook to put out a minor grease fire on the range or on other equipment. If a grease or oil fire occurs in a pan, place a cover over the pan and turn the heat off. Never use water on a grease fire because water will spread the fire.

Dietetic aides should become familiar with the operation of the fire extinguisher located near their work area. Different types of fire extinguishers should be used for different kinds of fires. Using the wrong type of fire extinguisher may make the situation even worse.

FIRE EXTINGUISHERS

Fire Extinguisher	Contents	Use	Operation
 Carbon Dioxide (CO2)	Liquid carbon dioxide under pressure	Electrical fires or burning liquids where a smothering action is needed	Carry to fire, pull pin on side of handle, and open valve. Hold by insulated handle. Squeeze handle grip and direct discharge from horn to base of fire. Discharge range is 6 to 8 feet. A 15 pound size lasts about 42 seconds.
 Dry Chemical	Bicarbonate of soda, dry chemicals, and cartridge of carbon dioxide gas	Live electrical fires; wood, paper, excelsior, and other ordinary combustable materials	Carry to fire, pull pin, and open valve (or press lever). Squeeze handle grip and direct discharge to base of fire. Discharge range is about 14 feet. A 30 pound size lasts 22 to 25 seconds.
 Pressurized Water	Plain water	Paper, wood, excelsior, cloth, and general combustible fires requiring cooling and quenching	Carry to fire, squeeze handle grip, and direct discharge to base of fire. Discharge range is 30 to 40 feet. A 2 1/2 gallon size lasts 50 to 55 seconds. Do not use on burning liquids or live electrical fires; it will spread the fire or cause a deadly shock.
 Soda-Acid	Bicarbonate of soda solution and sulfuric acid	Paper, wood, excelsior, cloth, and general combustible fires requiring cooling and quenching	Carry to fire, turn bottom up, and direct discharge to base of fire. Discharge range is 30 to 40 feet. A 2 1/2 gallon size lasts 50 to 55 seconds. Do not use on burning liquids or electrical fires; it will spread the fire or cause a deadly shock.

Fire Extinguisher	Contents	Use	Operation
 Foam	Aluminum sulfate and bicarbonate of soda	Grease, oil, gasoline, and paint fires	Carry to fire, turn bottom up, and direct discharge to base of fire. Discharge range is 30 to 40 feet. A 2 1/2 gallon size lasts 50 to 55 seconds.
 Gas Cartridge	Water and cartridge of carbon dioxide gas	Wood, paper, textile fires, gasoline, oil, anesthetics, or organic solvents	Carry to fire, turn bottom up, bump, and direct discharge to base of fire. Discharge range is 30 to 40 feet. A 2 1/2 gallon size lasts 50 to 55 seconds.
 Vaporizing Liquid	Carbon tetrachloride and other chemicals	Live, electrical fires	Carry to fire, turn handle, pump by hand, and direct discharge to base of fire. Discharge range is 20 to 30 feet. A 1 quart size lasts 40 to 45 seconds.

QUESTIONS:

1. The most common sources of fires in dietary kitchens are ____________, ____________, and ____________.

2. ____________ may be used to put out minor grease fires.

ASSIGNMENT:

I. Find out what kind of fire extinguishers are used in your place of employment. Describe the kinds of fires each will extinguish and how to use each extinguisher.

GROUP WORK:

I. Compare the fire extinguishers used at your place of employment with the fire extinguishers used at other training stations. Which types of fire extinguishers are most commonly used in dietary kitchens?

UNIT XI-1

SANITATION

SUBJECT: Food Contamination and Food-Borne Illnesses

TASK: 30. Handle food, beverages, equipment, utensils, and table settings in ways to prevent contamination.

OBJECTIVES: When you finish this lesson, you should be able to

a. identify ways disease may be spread through careless handling of food and equipment
b. analyze situations in which sanitation procedures have been violated
c. evaluate own personal habits of cleanliness in relation to accepted sanitation procedures
d. maintain cleanliness in order to eliminate or control common pests
e. identify unsafe food.

REFERENCE: Cornelius, Ethelwyn G. *Food Service Careers*. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1974. pp. 278-280, 282-287.

At least one million persons in the United States suffer from food-borne illnesses each year. These illnesses occur when the people responsible for the preparation and serving of food do not observe safe and sanitary methods of food handling.

Food-borne diseases or illnesses result when contaminated food or drink is taken into the body. These illnesses fall into two main categories: food infections and food poisoning.

Food infections are caused by eating foods containing harmful bacteria. The food acts as a carrier for the bacteria. The bacteria multiplies in the body of the individual and produces a food-borne illness. *Salmonella* and *Streptococcus* (Strep) are two kinds of bacteria transmitted in foods. When eaten, these bacteria produce a food infection.

Food poisoning results from eating foods in which bacteria have grown previously and developed a toxin or poison. *Staphlococcus* (Staph) and *Clostridium botulinum* are two kinds of bacteria that produce a poison or toxin in the food which results in food poisoning.

For these bacteria to grow and multiply, certain conditions must exist. Bacteria need: 1) food, 2) moisture, 3) warm temperatures, 4) darkness, and 5) oxygen (with the exception of botulinum). If the conditions are right, the bacteria will grow and multiply quite rapidly.

Food-borne disease prevention is essential. The dietetic aide needs to know how to prevent food-borne illnesses. In addition, he must want to prevent the occurrence of these illnesses. He must be alert, cautious, and conscientious as he carries out his responsibilities in handling and serving food.

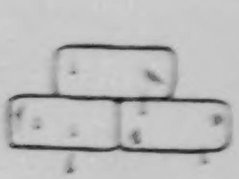
Name of Illness and Its Symptoms	Causative Agent	Foods Usually Involved
Staphylococcus (Staph) Disease: Food infections (Vomiting, cramps, abdominal pain, diarrhea, headache, nausea. Sometimes accompanied by fever.)	Staphylococcus entero-toxin (a poison developed by Staphylococcus when it grows in food.)	Cooked ham or other meat; chopped or pulverized food; cream-filled or custard pastries; dairy products; Hollandaise sauce; bread pudding; potato salad; chicken, fish, and other meat salads; "warmed-over" food.
Salmonellosis Disease: Food infections (Fever, headache, exhaustion, nausea, vomiting, cramps, diarrhea.)	Over 800 types of Salmonella bacteria; capable of producing gastro-intestional illness	Moist foods; prepared or unheated foods, such as custard-filled pastries, cream pies, egg or potato salads; dairy products; shell fish; meat; poultry; "warmed over" food.
Streptococcus (Strep) Disease: Scarlet Fever, Septic Sore Throat (Inflammation of the nose, throat, and mouth; red rash.)	Streptococci bacteria	Foods contaminated with nasal or oral discharges from person who has illness or is carrier. Foods contaminated with body waste on unclean hands.
Clostridium botulinum Disease: Botulism (Nervous symptoms, double vision, weakness, and paralysis of muscles. Inhibition of body secretions, inability to swallow, constipation. Most likely to be fatal.)	Toxins of Clostridium botulinum	Improperly processed low-acid foods or meats.
Shigellosis Disease: Bacillary Dysentery (Bloody diarrhea, nausea, exhaustion.)	Shigella bacteria	Foods contaminated with body wastes or unclean hands.
Trichinella spiralis Disease: Trichinosis (Nausea, abdominal pain, diarrhea, muscular pain, chest pain, fever.)	Larvae of Trichinella spiralis	Raw or insufficiently cooked pork or pork products.

FOOD-BORNE ILLNESSES

How Introduced Into Foods	Preventative or Corrective Procedure
Usually by food handlers through nasal discharges or pus in local skin infections (acne, pimples, boils, scratches, and cuts).	Handle food only when you are free from respiratory illnesses and infections. Practice sanitary work habits; wash hands frequently. Handle food with utensils, not hands. Keep cold food cold, hot food hot; cool food rapidly to safe temperatures.
Intestines of humans, birds and animals; sometimes carried by a healthy person; raw contaminated meat and poultry, eggs, and unpasteurized milk.	Use inspected or certified meat products. Control rodents and insects. Wash hands frequently. Keep surfaces, equipment, and utensils sanitary. Keep cold food cold, hot food hot; cool food rapidly to safe temperatures.
Coughing, sneezing, unsanitary food handling.	Use separate work surfaces for raw and cooked meats. Wash hands after handling raw meat, toileting, or touching soiled articles. Keep kitchen free of dust. Clean meat-cutting utensils after use. Keep food at safe temp.
Soil and dirt. Bacteria not killed in inadequately heated foods.	Use commercially canned foods. Store canned foods in cool room for only one year. Inspect cans before opening for bulges, damage, rust, leaks. Discard contents if they spurt out on opening the can, look bubbly, are off-odor, or are off-color. Store smoked fish at 38° F. or below. Never taste suspect food; boil for 15 min. and discard.
Unsanitary food handling.	Persons who are ill or carriers must not be allowed in food preparation and service area. Use pure water. Use leakproof sewer pipes and proper sewage disposal. Control flies and rodents.
Raw pork from hogs fed uncooked, infected garbage.	Use inspected pork and pork products. Serve pork (including sausage) well done. Cook roasts until center temperature is 165° F., preferably 170° F. Cook pork until meat turns gray.

There are four basic rules which can be used as guidelines in the handling and serving of food.

I. Keep Food Cold. Low temperatures do not kill food-poisoning bacteria, but as you can be seen on the chart on page 221, their growth can be slowed or stopped. Temperatures of 40° F. (4.4° C.) or below are necessary to reduce the growth of bacteria. Freezing stops growth of bacteria.



Refrigerate all perishable foods as soon as possible after their delivery. Refrigerate food products such as salads or cream-filled desserts containing moist carbohydrates or proteins immediately after preparation. Allowing these foods to stand at room temperature gives bacteria a chance to grow rapidly.

Refrigerate leftovers as soon as possible. Label all leftovers as to the contents of container and the stored date. Warm leftovers quickly. It is not advisable to keep leftovers more than 24 hours. Do not mix leftovers with fresh food. Food that has been held at room temperature for several hours should not be considered safe and cannot be made so by refrigeration.

The use of shallow pans, about 4 inches deep, for refrigeration of large amounts of food allows the food to cool more rapidly than it would in deep containers. This rapid cooling allows less time for the growth of bacteria to occur. Stirring the food during cooling also helps to reduce the length of the cooling time.

In regard to the storage of leftovers, some people have the misconception that food should be allowed to stand at room temperature for several hours. The belief is that putting food into the refrigerator while it is still warm will cause it to "spoil." This idea was common in years past when ice was used to keep food cold. Placing hot foods in the "ice box" caused the ice to melt. Refrigerating hot foods does not cause spoilage unless the cooling unit is overloaded. Then the temperature in the refrigerator is raised to a level where spoilage starts. If a large amount of hot food needs to be refrigerated, partially cool it by placing the pans of food in cold water before putting them in the refrigerator. Store all foods in covered containers.

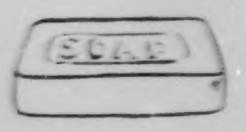
II. Keep Food Hot. The danger zone for the growth of bacteria is between 40° and 140° F. (4.4° and 60° C.). For this reason, hold hot foods at temperatures of at least 140° F. (60° C.).

Thoroughly cook foods such as pork, poultry, eggs, ground meats, and dehydrated food products to destroy certain types of bacteria. The center of the food should reach temperatures of 165° and 170° F. (74° and 77° C.).

III. Keep Food In Danger Zone Only A Short Time. Do not hold foods at temperatures between 40° and 140° F. (4.4° and 60° C.) for more than four hours. This time is cumulative; i.e., one hour in the morning, one hour another time, and two hours at a third time add up to the four hour limit.

Certain foods are more likely to be contaminated during these in-between temperatures than others. Do not hold turkey or other poultry dressings at these temperatures for more than four hours. Refrigerate leftover poultry meat, dressing, and gravy immediately. Sandwich fillings, salads, and cooked hams are examples of other foods which should not stand at room temperature more than four hours. Defrost all frozen meats and foods in the refrigerator, not on the counter top.

IV. Keep Food Clean. One way to keep food clean is to use clean equipment. Three "tips" for general cleaning of equipment include the following.



1. Clean all kitchen equipment used in the preparation or serving of food thoroughly after each use.
2. Clean and sanitize all utensils used in the preparation and service of food thoroughly before use.
3. Handle and store clean equipment properly to prevent contamination. Store clean dishes in closed storage, or place upside down on wire racks. Store silver with handles, tongs, etc., all turned the same way so that it can be handled without touching the part placed in the mouth.

Food may be infected by:

1. a person who sneezes or coughs.
2. hands that have not been washed properly.
3. fingernails which have not been cleaned properly.
4. the use of hands, instead of the proper utensil.
5. dishes not sanitized properly.
6. employees who are not well.
7. persons with cuts or infections on their hands.

The basic rules for food sanitation practices can be shortened into four clues to remember when handling food. Notice the repeated use of the number four.*

1. 4 rules--cold, hot, time, clean
2. 40° F. (4.4° C.) and below--4-inch deep storage pans
3. 140° F. (60° C.) and above
4. 4-hour incubation time

---

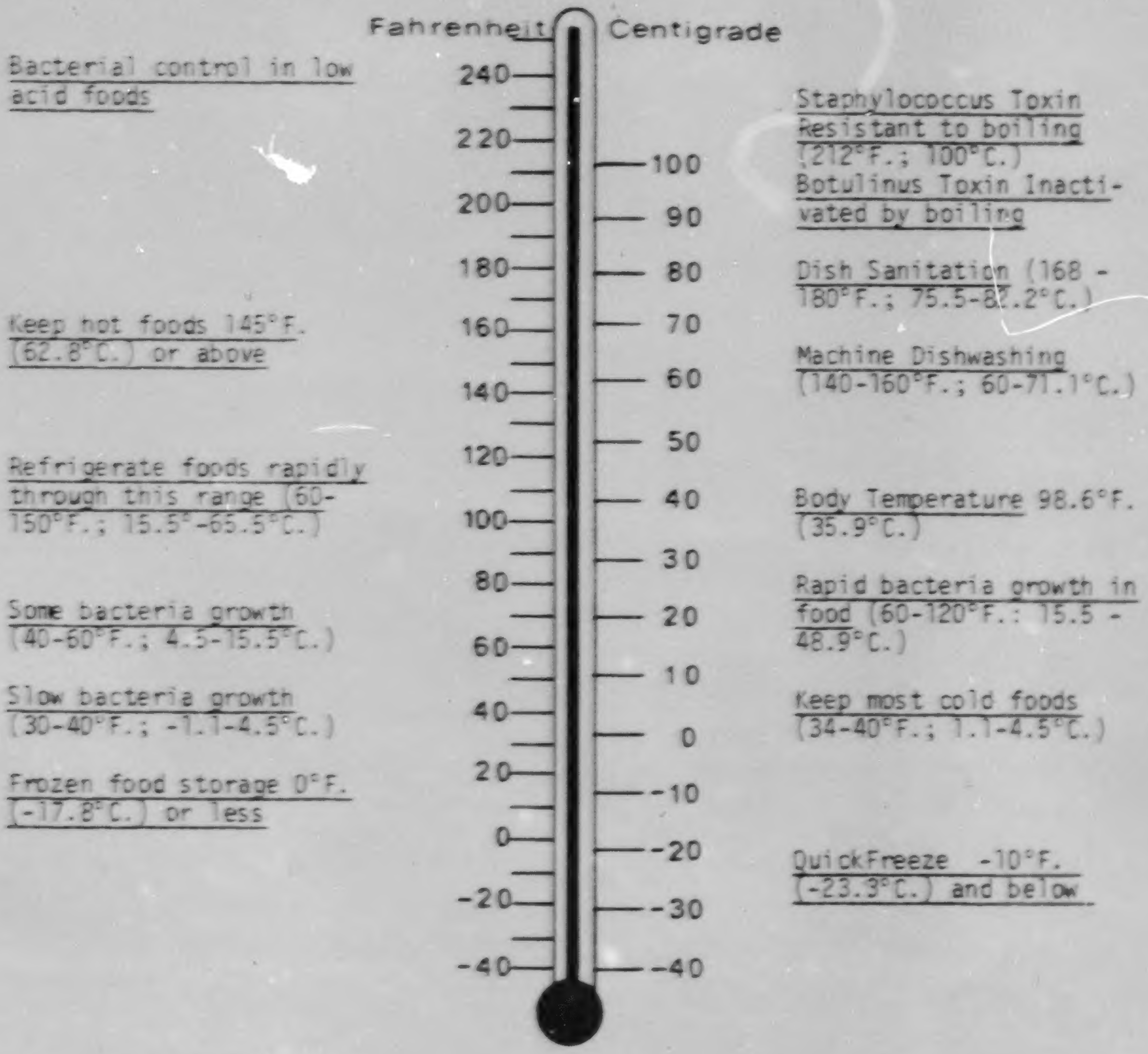
*Adapted from Current Practices in Food Protection, U.S. Department of Health, Education, and Welfare, Public Health Service. Cincinnati, Ohio. p. 7-3.

Never use the contents from a can that bulges, leaks, or is dented at the seam. Never use a can if the contents foam, have an off-color, or contain a milky liquid.

Special Precautions for Isolated Patients. In a hospital or nursing home, the nursing service may have a special plan for patients in isolation. They may use disposable tableware rather than standard dishes and flatware. If nondisposable items are used for salt, pepper, or sugar, keep them in the same room during the entire isolation period. Immediately destroy leftover food used by an isolated patient to avoid further contamination of patients and dietary employees. Destroy disposable dishes; sanitize others seperately.

THE EFFECT OF TEMPERATURE ON CONTROLLING BACTERIA GROWTH IN FOODS

The illustration below shows the effect of temperature on the control of bacterial growth in foods.


Fahrenheit
Centigrade
240
220
200
180
160
140
120
100
80
60
40
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-20
-40
100
90
80
70
60
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40
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0
-10
-20
-30
-40
Bacterial control in low acid foods
Keep hot foods 145°F. (62.8°C.) or above
Refrigerate foods rapidly through this range (60-150°F.; 15.5°-65.5°C.)
Some bacteria growth (40-60°F.; 4.5-15.5°C.)
Slow bacteria growth (30-40°F.; -1.1-4.5°C.)
Frozen food storage 0°F. (-17.8°C.) or less
Staphylococcus Toxin Resistant to boiling (212°F.; 100°C.)
Botulinus Toxin Inactivated by boiling
Dish Sanitation (168 - 180°F.; 75.5-82.2°C.)
Machine Dishwashing (140-160°F.; 60-71.1°C.)
Body Temperature 98.6°F. (35.9°C.)
Rapid bacteria growth in food (60-120°F.: 15.5 - 48.9°C.)
Keep most cold foods (34-40°F.; 1.1-4.5°C.)
QuickFreeze -10°F. (-23.3°C.) and below

SANITATION PRACTICES IN FOOD HANDLING

Not only are food-borne illnesses transmitted to foods, but communicable diseases are also spread by way of food. Examples of these are respiratory, intestinal, and skin diseases. All of these diseases may be transmitted by infected employees. The general sanitation rules listed below are good habits to form to protect both the health of the dietetic aide and those he serves.

1. Wash hands before handling food, after using the toilet, after using handkerchief, after handling garbage or poisons, and after handling dirty dishes.

   Never lick fingers or thumbs when preparing and serving foods.

   Avoid putting fingers on face, nose, or hair.

2. Always wear a hair net or cap when working in the food service area to keep hair away from food.

   Avoid putting fingers in hair because they become contaminated by the organisms which collect in the hair.

   Avoid wearing soiled aprons and outer garments.

   Keep fingernails clipped and clean.

3. Do not chew gum or smoke near the food preparation and service area.

   Do not cough or sneeze near food or dishes.

   Treat and report sores, rashes, boils, or other skin eruptions.

4. Touch only the handles of forks, knives, and spoons used in preparing foods, serving patient trays, or setting tables for dining room service.

5. Handle bowls, glassware, and cups properly.
   a. Do not touch the rims of glassware and cups.
   b. Do not put fingers inside mixing bowls, plates, and saucers.

6. Use tongs for:
   a. placing ice in glasses or pitchers.
   b. serving pastry, rolls or doughnuts.

QUESTIONS:

1. Why is it important that hair nets or caps be worn by employees serving food?

2. At what temperature range do bacteria grow most rapidly in foods?

3. What is meant by food-borne illnesses?

4. Few cases of food poisoning or infections occur in the United States.
_____a. True
_____b. False

5. What foods are usually associated with Salmonellosis?

6. Staphlococcus is a bacteria that produces a toxin in the food which results in food poisoning.
   a. Where are staphylococcus germs found?

   b. What happens when staphylococcus germs reproduce in food?

   c. How can staph food poisoning be prevented?

   d. What foods are most often involved in staph poisoning?

7. Botulism, a form of food poisoning, results from eating foods in which bacteria have grown and developed a toxin.
   a. Where is the botulism germ found?

   b. In what kinds of food is it most frequently found?

8. Which of the three germs causing food-borne diseases is most likely to be fatal if not treated quickly?

9. What are the two main categories of food-borne illnesses?

   a.

   b.

10. A chicken noodle casserole was prepared in the morning; it was left in the oven, which was turned off until late afternoon; and then it was warmed and served. Why was this not a wise procedure? What should have been done?

11. Sally made some ham salad and turkey salad sandwiches and put them in the refrigerator until serving time. Was this necessary? Why?

12. Ten gallons of stew had been prepared for use the next day. It was allowed to cool at room temperature for several hours and then placed in the refrigerator in the 10 gallon container. What two mistakes were made in this situation?

a.

b.

13. Jim cut his finger, and it was slightly swollen. He did not say anything about it to his supervisor, however, when his supervisor told him to remove some chicken from the bones. Which germ that causes a food-borne illness might Jim have spread to the patients through his infected cut?

ASSIGNMENT:

I. Choose at least three ideas from this unit that you can do to improve your work habits in relation to cleanliness and sanitation at your training station. Work out a plan for improvement in these areas. Turn this plan in to your teacher for approval. With the aid of your teacher, evaluate your progress each week for as long as necessary to form the habits.

GROUP WORK:

I. Prepare rodac plates or agar plates to show the growth of bacteria resulting from lack of personal cleanliness. Cough or sneeze on different agar plates. Touch one agar plate with dirty hands and another agar plate with clean hands. Place a hair which has not been sprayed with hair spray on an agar plate. Let a cockroach walk on an agar plate. Incubate the agar plates (keep the plates warm) so the bacteria will reproduce rapidly. Borrow a microscope from the science department to view the bacteria. View the plates the day that they are prepared, in 24 hours, and several days later.

II. View a film on safe food handling to learn the causes of food-borne illnesses, the kinds of bacteria that cause them, and the conditions needed for bacterial growth.

UNIT XI-2

SANITATION

SUBJECT: Sanitation Codes

TASK: 31. Follow federal, state, and local sanitation codes.

OBJECTIVE: When you finish this lesson, you should be able to
a. relate provisions of sanitation codes to the duties of a dietetic aide.

REFERENCE: Cornelius, Ethelwyn G. Food Service Careers. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1974. pp. 276-278.

The main purpose of food sanitation codes is to protect the consumer of food. Specific purposes are to

1) protect food against infection by observing sanitary standards. These standards reduce the opportunity for bacteria to gain entrance into the food and to multiply.

2) insure wholesomeness of food so that it is clean, free from contamination, and suitable for human use.

3) provide a clean, appealing, pleasant atmosphere for the patient's meal service.

Food sanitation programs cover all establishments where food is served, as well as food sources and the transportation of foods. Food sanitation programs are based on nationally accepted public health principles and standards, but methods may vary due to local customs and problems.

The United States Department of Health, Education, and Welfare and the United States Department of Agriculture are the two federal agencies most concerned with the sanitary aspects of food production. Two divisions of the Department of Health, Education, and Welfare are the Food and Drug Administration and the Public Health Service. These divisions set up model codes which may be adopted by states, counties, and cities.

Other agencies which have authority over food sanitation are state and local agencies, city health departments and boards of health, and the state departments of health. In general, the Public Health Service sets up the food sanitation code which is widely adopted by state and local health departments. This code defines applicable terminology; sets standards for food supplies and protection; sets standards for personnel and for food equipment; and provides for the inspection of sanitary facilities, contamination controls, physical facilities and operations.

A permit to operate may be issued to an establishment on the basis of the adopted code. Inspection of the health care establishment is done at regular intervals by a competent inspector from the agency in authority. Failure to comply with standards of the code may ultimately result in suspension of the permit to operate.

The dietetic aide must understand
1) the importance of sanitation.
2) the reason for the sanitation code.
3) the penalty involved if sanitation regulations are not met.

Understanding sanitation helps the dietetic aide follow the regulations carefully.

QUESTIONS:

Agencies

Food and Drug Administration
Public Health Service
Department of Health, Education, and Welfare

Department of Agriculture
State Department of Health
City Health Department

Use the above list of agencies to complete questions 1, 2, and 3.

1. The two main divisions of the United States Department of Health, Education, and Welfare which set up model sanitation codes are the ________________ and ________________.

2. A second federal agency which is concerned with the sanitation of food is ______________________.

3. Two types of local agencies which work with food protection and sanitation are ______________________ and ____________________.

4. The science of cleanliness is ____________________________.

5. Preventing and arresting harmful germs and bacteria in patient areas or operating rooms is maintaining ______________________ conditions.

6. Standards for sanitation in food service are established and enforced by laws known as ______________________________.

ASSIGNMENTS:

I. Find out what laws protect food in your city. What sanitation ordinances are in effect where you live? Which of these laws and ordinances affect you on the job as a dietetic aide?

II. Interview a resource person from a dietary kitchen or health department to determine reasons for sanitary practices in handling food. What laws help promote sanitary practice in health care establishments?

GROUP WORK:

I. Compare the information found for the previous assignment with that obtained by classmates.

II. Explain the need for sanitary practices by participating in a circular response (class members sit in a circle and take turns responding) to finish statements concerning sanitary practices in food preparation and service. Examples: "It is important to prepare food in a clean place because..." "Food served in a dirty utensil causes me to..." "Greasy smudges on a drinking glass make me feel..."

III. View a film on the role of sanitation and good housekeeping procedures in a food service department.

UNIT XI-3

SANITATION

SUBJECT: Procedures for Dishwashing

TASKS:
32. Wash and inspect glassware, flatware, and tableware for cleanliness and spotlessness.
33. Wash utensils and cooking equipment.

OBJECTIVE: When you finish this lesson, you should be able to
a. describe proper procedures for washing dishes and equipment.

REFERENCE: Cornelius, Ethelwyn G. Food Service Careers. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1974. pp. 287-298.

Dishwashing consists of both the cleaning and the sanitizing of dishes and utensils. The cleaning procedure removes visible soil, detergent, and wash water from the dishes and utensils. The sanitizing treatment eliminates bacteria which cause food-borne illnesses.

Health inspectors frequently take bacteriological counts of dishes and utensils used in food service operations. Some food services conduct their own bacteriological counts. Others hire bacteriologists to make regular inspections of the dishes, utensils, and equipment used in the food service operation. The bacteriological examinations are made regularly without advance warning.

QUESTIONS:

1. What temperature is recommended for rinse water used in dishwashing facilities?

2. When three compartment sinks are used for washing pots and pans, for what is each compartment used?

3. Chemicals that stop the growth of bacteria on the surfaces of dishes, pots, and pans are called ____________________ and ____________________.

4. Chemical cleansing agents are called ____________________________.

5. List steps to use for washing dishes by hand:

   a.

   b.

   c.

   d.

6. How should cups and glasses be placed in dish machine racks? Why?

7. When unloading the dish machine, what steps should you follow in the care of silverware?

   a.

   b.

   c.

8. Health inspectors in most localities make frequent ________ counts.

ASSIGNMENT:

I. Outline the procedure used for washing dishes, pots, and pans at your training station. List some ways you can improve your work habits in relation to proper dishwashing procedures.

GROUP WORK:

I. Compare the procedure for dishwashing used at your training station with procedures used at others.

II. View a film on proper dishwashing methods. Note the importance of using the proper rinse temperatures and detergent.

UNIT XI-4

SANITATION

SUBJECT: Cleaning versus Sanitizing

TASK: 30. Handle food, beverages, equipment, utensils, and table settings in ways to prevent contamination.

OBJECTIVES: When you finish this lesson, you should be able to
a. define the role of cleanliness in sanitation
b. describe the procedure for cleaning and sanitizing equipment.

Establishing A Sanitation Program

"Sanitation is a way of life." This statement by the National Sanitation Foundation means that sanitation is the quality of living that is expressed in the clean home, the clean farm, the clean business and industry, the clean neighborhood, and the clean community.

Sanitary conditions are of utmost importance to any establishment dealing with food preparation and service. Customers and patients expect cleanliness and sanitation. All personnel must work to insure the satisfaction of customers and patients. The management both provides facilities, equipment, and materials for developing a program of cleaning and sanitizing, and sees that the program is followed. Employees carry out the program.

Four goals of sanitation are:

1. to prevent disease
2. to prevent food poisoning
3. to prevent food spoilage
4. to prevent off-odors or off-flavors from developing in food or from being transferred to food.

Cleaning and sanitizing duties are performed on a daily, weekly, and occasional basis. Each employee is responsible for the day-to-day cleanliness of his or her work station. Weekly chores, such as polishing floors or cleaning refrigerator racks, should be scheduled for specific days and have definite assignments as to which employee is responsible. Even those done on an occasional basis should have a definite assignment. Occasional tasks include cleaning grease traps, removing lint and dirt from ventilators, washing windows, etc. When there is a slack in immediate work, occasional tasks can be done by any available employee.

Cleaning is necessary to keep equipment operating properly. Inadequate care of equipment causes higher operation and repair costs. The quality of food suffers from improper or inadequate cleaning of equipment. Off-flavors can develop in foods prepared with poorly cleaned equipment. For example, coffee can absorb a bitter taste from a poorly cleaned urn due to oily substances.

Bacteria cause diseases. Even the tiniest spot of food left on equipment allows bacteria to grow. Some types of bacteria travel by air, so store equipment in an enclosed area or upside down. Use covers on leftover food to prevent drippage from above and to retain flavors. Poor cleaning practices also encourage filthy disease-carrying pests to inhabit an area.

Cleaning and Sanitizing

The words clean and sanitary are used frequently in health care establishments. Clean means absence of soil. Sanitary means absence of bacteria, molds, fungi, or yeast. Cleaning and sanitizing are methods used to keep utensils and equipment clean and free from bacteria.

When cleaning, use these three elements: 1) water, 2) friction, and 3) a wetting agent, such as a soap or detergent.

When sanitizing, use chemicals or temperature. Some chemicals are safe for use around food. Other chemicals are dangerous and should be used only in areas where food is not present such as on floors or in rest rooms. Bacteria cannot live in high temperatures. Boiling an article for ten minutes is an effective means of sterilization.

Be careful not to recontaminate equipment by improper handling after it has been sterilized. Place dishes in racks for washing, then store in the same racks without touching the dishes themselves. After sanitizing grasp flatware and utensils only by the handle.

QUESTIONS:

1. In quantity food preparation, precautions must be taken to insure that the food is nutritious, ______________, and ______________ to eat.
2. Explain the statement: "Sanitation is a way of life."
3. In any health care establishment the standards of sanitation and ________ ________ should be emphasized as much as the standards of quality and cost.
4. The four sanitation goals are

   a.

   b.

   c.

   d.

5. What are three results of failure to clean equipment properly?

a.

b.

c.

6. Disease and poison transferred by food to human beings are largely caused by ______________________________.

7. Two safeguards against air-borne types of contamination are:

a.

b.

8. Poor procedures for handling food and __________________ may cause contamination.

9. What is the difference between cleaning and sanitizing?

10. The three elements necessary for cleaning are _____________, _____________, and _________________________________.

11. What two methods may be used for sanitizing?

a.

b.

12. Why is it a good idea for food supervisors to set up a program for cleaning and sanitizing?

13. Only a few dietetic aides are responsible for observing high standards of cleanliness and maintenance.
_____a. True
_____b. False

14. A clean utensil is always sanitary.
_____a. True
_____b. False

15. Knives, forks, spoons, whips, spatulas, and similar equipment may be picked up by either end if one's hands are clean.
_____a. True
_____b. False

ASSIGNMENT:

I. Outline the procedure for cleaning and sanitizing equipment at your training station. List your specific duties for carrying out the sanitation program.

GROUP WORK:

I. Compare the procedure for cleaning and sanitizing equipment at your training station with procedures used at other training stations. Discuss the difference between cleaning and sanitizing.

II. View a film which demonstrates both sanitary and unsanitary methods of handling food and utensils.

UNIT XI-5

SANITATION

SUBJECT: Pest Prevention

TASK: 30. Handle food, beverages, equipment, utensils, and table settings in ways to prevent contamination.

OBJECTIVES: When you finish this lesson, you should be able to
- a. identify common pests that are dangerous carriers of harmful bacteria
- b. explain control methods for eliminating pests from storage and food service areas.

REFERENCE: Cornelius, Ethelwyn, G. Food Service Careers. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1974. pp. 280-281.

The standard of living in the United States is one of the highest in the world. We expect to be served good, wholesome food in a clean, pleasant atmosphere. Nothing is less appetizing than a fly circling over a dining table, a roach crawling up a wall, or a mouse darting across the floor. Pests carry diseases. Any establishment handling food must take measures to eliminate pests.

The most common pests found in health care establishments are roaches, flies, ants, and rodents such as rats and mice.

INSECT PESTS

Roaches--Roaches are familiar to nearly everyone, especially in Texas' warm climate. There are many varieties of roaches, but in general, roaches have flat bodies which enable them to hide in cracks and crevices. Roaches are known carriers of Salmonella, which causes severe vomiting, diarrhea, and fever. They spread filth and disease. They are sensitive to light and feed on contaminated material in the dark. After taking germs into their stomachs, the roaches spread these germs to anything they touch or to anything that touches any of their discharges. Some signs that roaches are present include stains from their droppings, a musty odor, or empty egg cases from which roaches have hatched.

Flies--There is no such thing as a clean housefly. The female fly lays her eggs in decaying matter of human or animal wastes, and the hatched offspring never seem to improve their surroundings! Flies have an amazing sense of smell, and they are attracted to any type of food or waste odors. A fly spreads germs in three ways: from its body wastes, from its feet and hairy legs, and in its manner of feeding. When eating solid food, the fly spits up a stomach fluid to dissolve the food; this fluid is highly packed with germs.

Ants--Any of the several hundred different species of ants can find their way to food. Ants eat a wide variety of food, particularly sweets and fats such as syrup and fried foods, and can easily contaminate anything they touch. Ants spread germs by carrying filth and waste to food on their legs and bodies.

RODENT PESTS

Rats and Mice--Both cause much suffering each year in illness, death, and destruction of property. When these pests are numerous, two things are certain: 1) there is an easily available supply of food, and 2) there are plenty of places for them to hide and raise their offspring. Both pests can gnaw through wood, and squeeze through suprisingly small openings. A 1/2-inch crack will admit a young rat or an adult mouse! Both dislike open spaces, and they move along walls, leaving a dark, greasy trail. They prefer to take their food into hiding, but they will eat larger items wherever these items are found. Rats and mice transmit disease by the fleas they carry on their bodies and by their urine and feces which infect food.

PANTRY PESTS

Bran Beetles--are small and brownish in color and are usually found in flour, mixes, and cereal. These beetles are often called "weevils."

Weevils--are gray or brown wedge-shaped beetles which infest dried beans and peas. The rice weevil infests rice, macaroni, noodles, and spaghetti. Adult weevils buzz and fly around lights.

Hide and Larder Beetles--have black backs, but larder beetles have a yellow band across their backs. They feed on ham, bacon, cheese, smoked meats, and organic debris (which is the remains of living creatures.)

Cereal Mites--are so small that they are hardly visible to the naked eye, but in large numbers, they appear to be a fluffy mass of gray powder, due to the shed skins of the living mites. These pests are commonly found in cereal and cereal products. A severe skin eruption may develop in humans handling infested products.

Flour and Meal Moths--The "worm" stage is the most destructive; it feeds in corn, wheat, flour, popcorn, dry baby foods, candy, and dried vegetables, among other things. Flour and meal moths are distinguished from pantry beetles by a webbing which they spin over and through the materials in which they live.

Silverfish and Firebrats--Silverfish are gray and about 1/2-inch long. They have no wings and run rapidly along floors, walls, and ceilings. Firebrats are tan and gray and are also unable to fly. Both hide in cracks and between layers of insulation. They feed on starchy materials, such as wallpaper paste, starched clothing, and spilled starchy food.

DESTROYING AND REPELLING PESTS

To remain free of pests, the health care establishment must take pest control measures on a regular basis. Proper sanitation and housekeeping reduce the likelihood of pest infestation, but usually these measures are not enough to completely control or eliminate all types of pests.

Professional pest control experts should handle any exterminating or repelling of any type of pest. If you see any signs of pests at your training station, report them to your supervisor immediately. Losses due to patient annoyance, unfavorable publicity, and damage from insects and rodents total several billions of dollars each year. Do not allow your training station to become a nesting place for any type of pest!

QUESTIONS:

1. Name the most common pests found in health care establishments.
2. Pests are dangerous carriers of ____________________.
3. __________________________ are an important part of any sanitation program.
4. Pests are eliminated from storage and food service areas by _____________ _____________, _________________________, and ___________________________.
5. When signs of pests are noticed, the employee should _____________________ _________________________.

ASSIGNMENT:

I. Find out the insecticides that are acceptable according to the board of health. Why are some types banned?

GROUP WORK:

I. Compare the information for the above assignment with information obtained by other dietetic aides.

II. View a film on the basic rules of sanitation, handling potentially hazardous foods, controlling pests, personal hygiene, and food storage.

UNIT XI-6

SANITATION

SUBJECT: Care of Furniture, Floors, and Surface Areas

TASK: 34. Clean and sanitize furniture, floors, and other surfaces in the kitchen and in the serving area.

OBJECTIVES: When you finish this lesson, you should be able to
a. explain the importance of clean tables and chairs
b. describe the procedures for cleaning various surfaces.

FURNITURE AND SURFACE AREAS

Cleanliness is necessary to preserve the appearance of furniture and to sanitize surface areas. Clean attractive surroundings, also help to make a meal enjoyable. If you are assigned to dust the furniture or wipe the table tops and chair seats, remember the role of cleanliness in creating an atmosphere that promotes a good appetite in the patient.

What procedure should you follow to clean a table or counter? Obviously, the first step is to remove the dishes, glasses, silverware, and trash. If a cart is used for the removal of these items, use a separate pan for each item. Place silverware in one pan and dishes in another pan. Place the dishes in the pans quickly, but quietly. Using separate pans for each different item eliminates breakage.

The next step is to wipe the table or counter. Use a cloth which is clean, rinsed, and wrung out. Imagine how you would feel if someone used a dirty cloth to wipe the table or counter where you were eating. After wiping the table or counter run your hand over it to be sure that no sticky spots remain and that it is dry.

At least once a day, clean table tops and counters with a sanitizing solution. The kind of sanitizing solution used varies from one establishment to another.

Check the ash trays, salt and pepper shakers, and sugar containers and wipe these items clean, if necessary. Use a napkin to wipe the ash tray clean, and shine it with a clean cloth. While you are at the table check the chair seats, wipe them clean with a damp cloth, and dry them with a clean cloth.

Other surfaces to keep clean are windows, shelves, glass counters, pie cases, service equipment, and beverage containers. Dusty or dirty surfaces not only affect the patient's appetite but also provide opportunities for bacteria to grow on food as well. Be alert to the appearance of all the surfaces in the area where you work and keep them spotless!

Plan ahead when you are assigned cleaning tasks and take all the equipment you need with you. Move from one area to the next in an organized manner. If you have several different things to do, finish one task and then go on to the next.

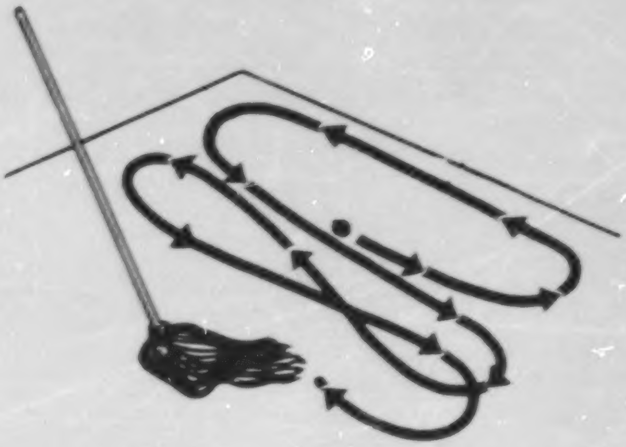
FLOORS

Have you noticed the floors in the health care establishment where you work? Have you stopped to think about the importance of clean floors in a place where food is served? Floors must be kept clean for two reasons: safety and appearance. Floors should be checked constantly for spilled foods or other debris. Spills should be cleaned immediately--not after someone has fallen. Daily or more frequent cleaning of floors is necessary in all health care establishments. If cleaning is carefully done each day, it will not be a difficult task. The chart below gives suggested procedures for cleaning floors.

FLOOR FINISHES	CARE REQUIRED
Concrete--a hard, compact substance made of sand, gravel, cement, and water.	Scrub with neutral soap suds; rinse. Sweep regularly.
Terrazzo--small chips of marble set in cement and polished.	Scrub with neutral soap suds; rinse and mop dry. Abrasive cleaner may be used occasionally to remove heavy soil and stain. Terrazzo sealer may be applied to areas where traffic is heavy.
Ceramic Tile--a mixture of clay and water which has been baked at a high temperature. May be either glazed or unglazed.	Sweep with soft brush. Wash with neutral soap suds; leave suds on long enough to loosen soil; mop; rinse with clear, warm water; mop dry.
Rubber Tile--various types of rubber are heated and rolled out under pressure; then cut into tiles.	Sweep with soft brush. Mop with clean lukewarm water. If soil is not removed use a small amount of ammonia or non-fat synthetic cleaner. Mop a small section at a time; rinse; dry; buff thoroughly. The more the floor is buffed, the less often it will need to be washed.
Vinyl Tile--similar to rubber tile. A type of plastic which is tough, flexible, and shiny.	Sweep with soft brush. Wash with ordinary cleaning solutions. Rinse and mop dry.
Hardwood (waxed)--oak is most commonly used. Beauty is in the grain of the wood.	Sweep with soft brush or mop free from oil, since oil tends to dissolve wax and leave a film over the surface of the floor. Remove spots by rubbing the floor with a cloth dampened with liquid wax and polish. Remove exceptionally soiled spots with steel wool and a cleaning solution. Remove wax by rubbing the floor with a cloth dampened with a prepared cleaner. Then wash the floor with mild, neutral soap; rinse with clear water; dry; rewax and polish.

FLOOR FINISHES	CARE REQUIRED
Carpet--heavy, woven or felted fabric usually with a nap or pile.	Vacuum daily. Remove spots immediately. Shampoo approximately twice a year. Reset or brush pile after shampooing.

A task can either be done in a way which takes an unnecessary amount of time and energy or in a way that takes the least possible amount of time and energy. Cleaning or mopping floors is no exception. Below are some general guides for efficient floor cleaning.



1. Use two buckets--one filled with clean warm water and one filled with water to which a synthetic detergent has been added.
2. Dip the mop into the second bucket and wring out until partially dry.
3. Start about 2 feet from the baseboard as shown in the illustration and then make a long stroke close to the baseboard. Use a figure-8 motion as you mop. To remove any stubborn spots, use the heel of the mop.
4. Mop an area about 9 x 12 feet; then rinse and dry the floor.
5. Change cleaning solution and rinse water often.
6. Clean the equipment when the job is completed and store it in specified areas.

QUESTIONS:

Fill in the blanks with the word(s) that complete(s) the statement.

1. The cloth used to wipe the table should be ____________________, rinsed, and wrung out.
2. After wiping the table, check for any remaining sticky spots by ______________________________.
3. Table tops should be cleaned with a sanitizing solution at least ______________ a day.

4. Plan ahead when you are assigned cleaning tasks and take all the ______________________ you need with you.

5. The motion to be used when mopping floors is a ______________________.

Match the letter of the type of floor to the suggestions for care of floors. Types of floors may be used more than once.

CARE

_____ 6. Remove spots with a cloth dampened with a liquid wax.

_____ 7. Use a sealer in heavy traffic areas.

_____ 8. Wash with ordinary cleaning solutions.

_____ 9. Use steel wool and a cleaning solution to remove heavy soil.

_____ 10. Use ammonia to remove soil.

_____ 11. Shampoo at least twice a year.

_____ 12. Use abrasive cleaner occasionally to remove soil and stain.

_____ 13. Leave neutral soap on floor long enough to loosen soil.

_____ 14. Never use an oil mop for dusting.

TYPES

a. Carpet
b. Concrete
c. Clay Tile
d. Hardwood
e. Rubber Tile
f. Terrazzo
g. Vinyl Tile

ASSIGNMENT:

I. Using the chart on pp. 244 and 245, make a floor care chart using the floor types found in your training station. Identify the kind of floors and the procedures to use in caring for them.

GROUP WORK:

I. Compare your floor care chart with those made by other dietetic aides. What types of floors were most commonly found?

UNIT XII-1

BASIC SKILLS IN MANAGEMENT

SUBJECT: Dietary Office Procedures

TASK: 35. Assist in the management of a dietary office.

OBJECTIVE: When you finish this lesson, you should be able to
a. describe procedures for filing material and keeping inventory records in a dietary office.

While it is not the primary duty of the dietetic aide to set up and maintain files, she may be asked to assist in filing certain information. She should be familiar, therefore, with various filing systems. The basic ways of indexing files are these:

1. Alphabetical filing, the one most widely used, stresses the name or topic as the important item (see Figure 1).
2. Subject filing arranges records by topic areas rather than by name (see Figure 2).

Figure 1

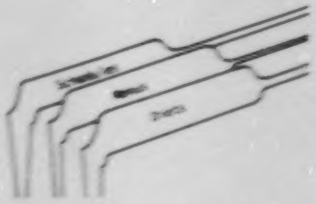


Figure 2

3. Geographic filing arranges records by location--east, west, north, south, countries, states, counties, or cities (see Figure 3).

4. Numeric filing means that every item is given a number. Data that can be filed numerically include bank checks, invoices, letters, memoranda, and notices (see Figure 4).

Figure 3

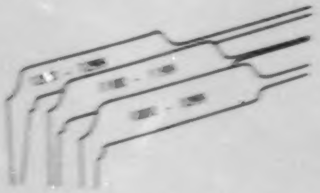


Figure 4

Supplies used in filing include guides, dividers, folders, tabs, labels, and colors. If the dietetic aide is called upon to do some filing, she should learn the filing system used by the hospital or nursing home where she is employed and follow it carefully. Some suggestions for maintaining dietary office files are given below.

DO'S AND DON'TS FOR BETTER FILING

DO:

Use plenty of dividers and file behind the dividers.
Stagger divider tabs for easy viewing.
Keep papers neatly arranged in the folders.
Line up papers along the top and left margins. Always turn the letterhead to the left side of the drawer.
Allow for extension.
Use staples to fasten related papers together.
Use "out" cards for checking folders out to individuals.
Use colored tabs for easy identification of various sections of the file.

DON'T:

File more than 10 folders per divider.
Overstuff folders. Limit each folder to approximately one-half inch of papers.
Let the index become obsolete.
Use paper clips, rubber bands, or straight pins to hold papers together.
Fasten sheets in folders, except for very important documents.
Let inexperienced personnel replace documents in files without close supervision.

FOOD SUPPLY FORMS

Several forms are used in keeping an account of food supplies. The dietetic aide may be asked to work with these forms. There are two principal types of inventories: (1) physical inventory and (2) perpetual inventory.

PHYSICAL INVENTORY

A physical inventory is one for which an actual count of supplies on hand is made and recorded. Physical inventories are usually taken at the end of each calendar month or accounting period. The items on hand (raw or cooked) are listed and the quantity is recorded. Small quantities of left-over food or fractions of a pound are not counted in the physical inventory, but large quantities are counted. For the inventory to be of greatest use, the dollar value of the items must also be recorded.

To take a physical inventory, prepare typed sheets which list the items by location or type of product, such as fruit, vegetables, etc. You may list the items alphabetically under each location. The inventory is usually taken by two people working together, with one checking the stock and the other entering the amount of the item on the list. Record the items by their location as they are stored, not by their location on the sheet. This reduces the possibility of overlooking items.

Sample of Physical Inventory

DATE:

ITEM	DESCRIPTION	SIZE OF UNIT	NO. ON HAND	COST PER UNIT	TOTAL VALUE

In taking a physical inventory, record each item and specify the brand and grade. List the size of the container (such as No. 10 can). Count and record the number on hand.

After the inventory sheets are completed, enter the sheets in a permanent inventory record. The permanent inventory record may be in the form of either cards or a book with half pages for extensions and full pages for descriptions.

From purchase records, you can figure the cost per unit. Then, by multiplying the number of units on hand times the cost per unit, you will know the total dollar value of that item.

To check the inventory for accuracy, verify adding machine tapes, compare extensions with those of previous periods, and determine the reason for any unusual variation.

PERPETUAL INVENTORY

A perpetual inventory is usually set up with a separate sheet or card for each item. The perpetual inventory is kept current. Every time an item is received, it is recorded on the card; and every time it is used, the amount used is subtracted. Previous records of the amount used over a period of time helps establish a minimum and maximum level of each food. When the minimum level is on hand, it is time to reorder to the maximum level. The dollar volume of the item may also be recorded. The perpetual inventory may require considerable employee time to keep it up to date.

Sample of Perpetual Inventory

ITEM: BRAND:

DATE	SIZE OF UNIT	AMOUNT RECEIVED	COST PER UNIT	TOTAL COST	AMOUNT USED	COST OF AMOUNT USED	BALANCE ON HAND

MAXIMUM LEVEL ______________ MINIMUM LEVEL ______________

QUESTIONS:

1. Miss Jackson, the administrative dietitian, explained the filing system of the hospital to the new dietetic aide, Dorothy, so that she could help with some of the record keeping in the dietary department. What are some of the supplies used in filing that she discussed with Dorothy?

In Items 2-8, match the type of indexing which would be used to file the following papers.

PAPERS

_____2. Diabetic Diets (suggestions for)
_____3. Armour and Company
_____4. 19.3
_____5. General Power and Light
_____6. Exchange List
_____7. Sixth Floor Diet Records
_____8. Mrs. Jones, Diet Selection Sheet

TYPES OF INDEXING

a. Alphabetical
b. Subject
c. Geographic
d. Numeric

9. When are physical inventories usually taken?

10. What is counted in an inventory?

11. How is the value of items on hand derived?

12. Are small amounts, such as fractions of a pound, usually counted when taking physical inventories?

13. What are four steps in taking a physical inventory?

a.

b.

c.

d.

14. When the inventory is completed, where is the information entered?

15. What are three reasons for checking the inventory?

a.

b.

c.

ASSIGNMENTS:

I. Summarize the procedures used for taking inventory at your training station.

II. Identify the filing system(s) used at your training station. Practice filing materials in this type of system.

GROUP WORK:

I. Compare the list compiled in Assignment I, with those of other students.

II. List the advantages and disadvantages for the various types of inventory procedures. Turn these lists in to your teacher.

UNIT XII-2

BASIC SKILLS IN MANAGEMENT

SUBJECT: Public Relations in Dietary Department

TASK: 35. Assist in the management of a dietary office.

OBJECTIVES: When you finish this lesson, you should be able to
a. describe techniques of good public relations in dealing with staff personnel and patients
b. identify appropriate telephone etiquette for a dietary office
c. analyze situations dealing with telephone calls.

Being able to get along with people is an asset in any type of job. For the dietetic aide, the development of desirable relationships with the administration, patients, and fellow employees is particularly essential. This task is difficult because many of the people with whom she has daily contact have definite ideas concerning food, food habits, and the services provided by the dietary department. Regardless of whether the dietetic aide is dealing with her supervisors, fellow employees, visitors, or patients in the hospital or nursing home, certain attributes enable her to successfully handle most situations involving persons with whom she comes in contact.

Among the most important of these attributes are

1. an objective attitude--the ability to separate the problem from the person involved and to refrain from taking things personally.
2. a warm, friendly (not gushy) approach to people.
3. a sense of justice, enabling her to resist pressure.
4. open mindedness.
5. a sense of humor, even when the joke is on her.
6. the art of persuasion, often by example, which encourages the cooperation of others without antagonizing them.

TELEPHONE ETIQUETTE

The following information will be helpful to the dietetic aid in improving her telephone etiquette.

1. Answer promptly. Be ready to talk as soon as you pick up the receiver. Speak directly into the phone in a normal voice. Hold the mouthpiece about one inch from your mouth. Enunciate clearly. A smile or frown can be detected by the person who is talking with you on the phone.
2. Identify yourself. Give the name of your station, followed by your name. Instructions may vary at each hospital or nursing home.
3. Take calls for others courteously. If the person called is unable to answer the phone, give a sufficient explanation, such as, "I am sorry, Mrs. Franklin is talking on another line." Offer a choice between

waiting and having the call returned. For example, "Would you care to hold the line or may I ask Mrs. Franklin to return your call?" Another important rule is to WRITE ALL INFORMATION DOWN. Do not trust your memory--you might not be around to deliver a verbal message!

4. Take messages accurately. Keep a pad and pencil available for taking messages. Request, rather than demand, information, i.e., "May I tell her who is calling?" Repeat the information back to caller to make sure it is correct. Be sure to write down the time of the call, especially if the person called for is out of the office.
5. Handle complaints tactfully. When you answer the phone, you represent your employer. Adopt a pleasant, helpful attitude. Listen carefully and remain calm and friendly. Avoid blaming others or taking matters personally. If mistakes are made, apologize. Be ready to give information or assistance. For example, "I am sorry if there has been some mistake, but Mrs. Franklin has been unable to return your call. Could someone else assist you?"

Guidelines for a successful telephone personality include the following:

1. Use a moderate rate of speech.
2. Speak distinctly.
3. Choose the right word.
4. Use a normal conversational tone.
5. Avoid a monotonous voice.
6. Use proper emphasis.
7. Use a low-pitched tone.
8. End calls pleasantly.

QUESTIONS:

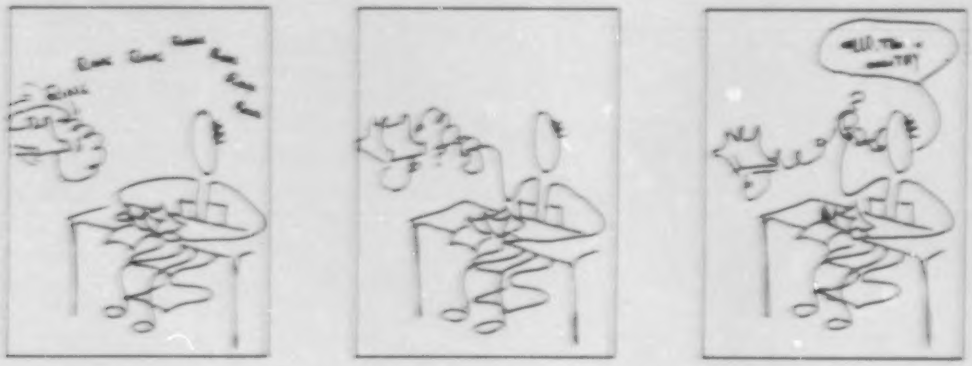
Read the following case situations and place an X in the blank which indicates the alternative you consider most tactful in handling the problems.

1. Mrs. Floyd, a very wealthy widow, was admitted to the hospital for observation. When the evening meal was served, she found that there was no salt on her tray. She sent for the dietetic aide and demanded some salt. The aide should
   _____a. bring Mrs. Floyd the salt.
   _____b. ignore her demands completely.
   _____c. report to head dietitian for directions.
   _____d. remind Mrs. Floyd of her poor manners.

2. Mrs. Baker, head dietitian, has reminded her staff a reasonable number of times about the importance of double-checking patients' trays so that no errors are made in dietary service. In her absence from the service area, a regular diet is served to a diabetic patient. She does not know which of the three aides is responsible for the oversight. The aide who is responsible should
   _____a. secretly report that one of the other aides was responsible.
   _____b. remain silent.
   _____c. admit that she is responsible and accept the consequences.
   _____d. decide that she is not a capable person and quit her job.

3. A patient who is a chronic complainer in the hospital, uses every opportunity to complain about the food, the service, and the incompetent dietitian. Generally, she finds it convenient to use the dietetic aide as a sounding board. The aide should
   _____a. help convince the patient that the dietitian is incompetent.
   _____b. tell the other patients what the "griper" thinks about the food and the dietitian.
   _____c. carry tales to the dietitian.
   _____d. defend the dietary department when she can and remain silent when she cannot.

4. List four mistakes in telephone etiquette evident in these three cartoons:


Ring Ring Ring Ring Ring Ring

Impatient phone — Receiver lifted, time passes... — Speaks.

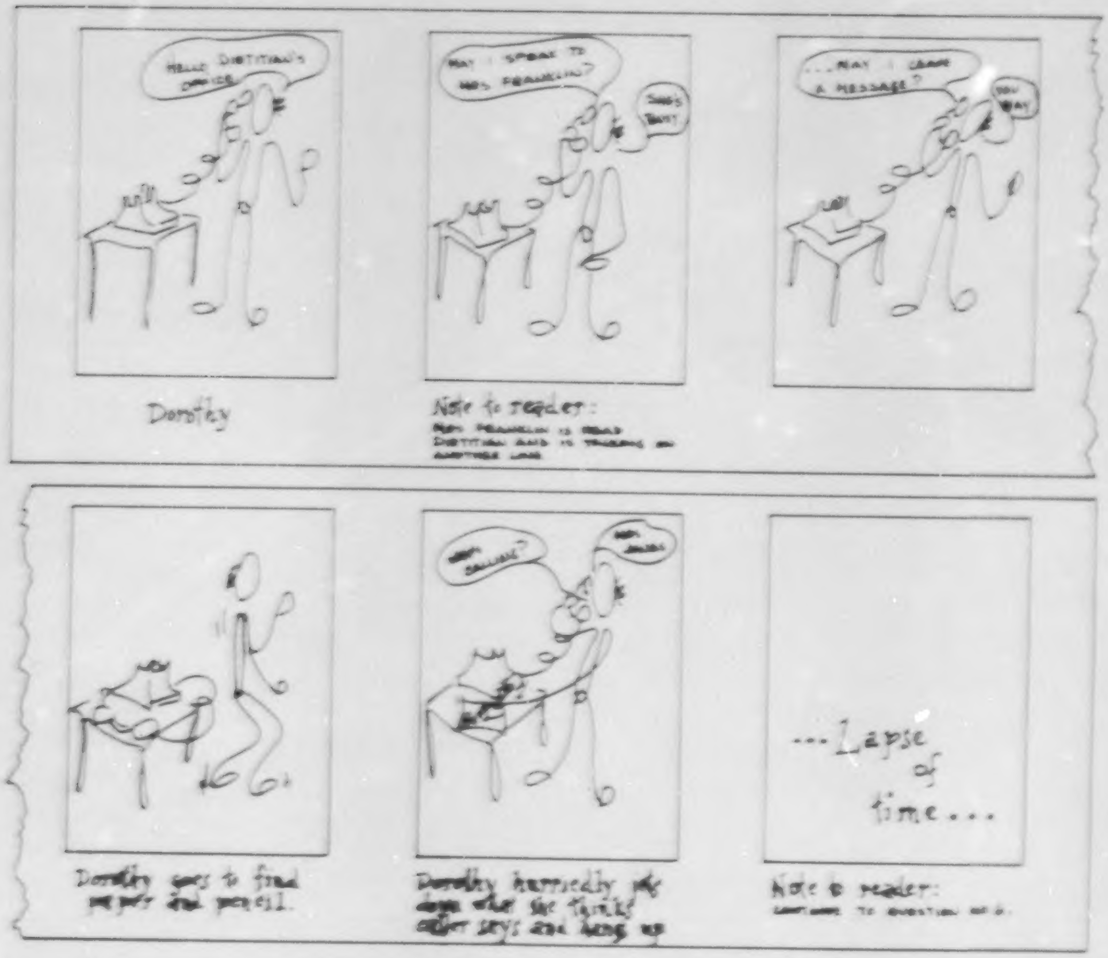
a.

b.

c.

d.

5. What seven rules of telephone etiquette are omitted in the six cartoons below?


HELLO DIETITIAN'S OFFICE
Dorothy
MAY I SPEAK TO MRS. FRANKLIN?
SHE'S BUSY
Note to reader:
MRS. FRANKLIN IS HEAD DIETITIAN AND IS TALKING ON ANOTHER LINE
...MAY I LEAVE A MESSAGE?
YOU MAY
Dorothy goes to find paper and pencil.
WHO'S CALLING?
Dorothy hurriedly jots down what she thinks caller says and hangs up
...Lapse of time...
Note to reader:

a.

b.

c.

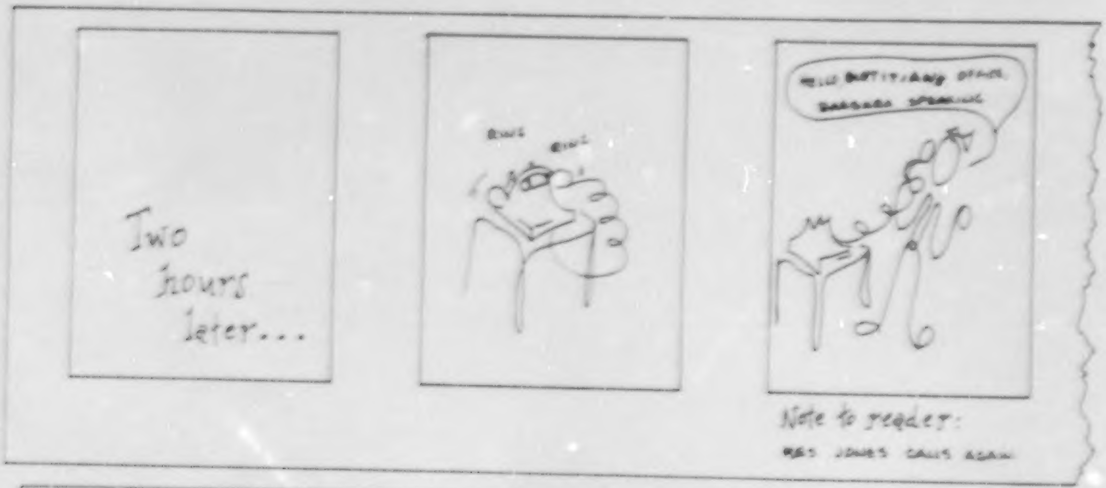
d.

e.

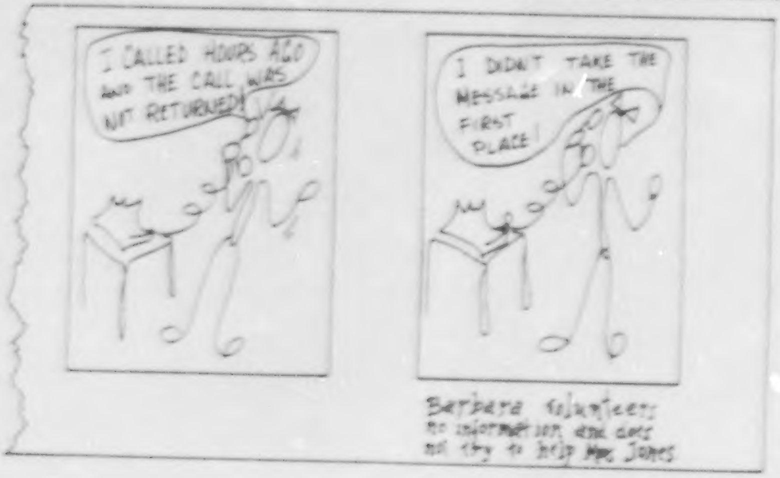
f.

g.

6. What three rules of etiquette are omitted in these five cartoons?


Two hours later...
RING
RING
HELLO DIETITIAN'S OFFICE
BARBARA SPEAKING

Note to reader:
MRS JONES CALLS AGAIN


I CALLED HOURS AGO AND THE CALL WAS NOT RETURNED!
I DIDN'T TAKE THE MESSAGE IN THE FIRST PLACE!

Barbara volunteers no information and does not try to help Mrs Jones

a.

b.

c.

ASSIGNMENTS:

I. Make posters or bulletin board displays showing techniques of good public relations in dealing with staff personnel and patients.

II. Using "telephone kits" available through the local telephone company, practice answering the phone properly for the following types of incoming calls. With the help of your teacher and/or a classmate, rate yourself with the chart below.

1. Routine call to the dietary department
2. Caller who requests information which will take some time to find
3. Call which must be transferred to the nursing station
4. Caller who has a complaint about the food
5. Caller who wants to leave a message for the dietitian
6. Caller who wishes to speak to the cook

CHECK LIST FOR TELEPHONE PERSONALITY[1]

	EXCELLENT	GOOD	FAIR	POOR
1. Uses normal conversational tone of voice				
2. Speaks distinctly				
3. Talks at moderate pace				
4. Uses correct choice of words				
5. Has proper inflection (rise and fall) of voice				
6. Gives information clearly and accurately using proper emphasis				
7. Maintains low pitched voice				
8. Ends call pleasantly				

GROUP WORK:

I. Role play situations which involve dealing with patients and fellow workers. Show first a poor and then an improved way for handling each situation.

---

[1] Adapted from "Telephone Pointers," Southwestern Bell Telephone System.

UNIT XII-3

BASIC SKILLS IN MANAGEMENT

SUBJECT: Dietary Records

TASKS:
35. Assist in the management of a dietary office
36. Make tabulations for the number of general and therapeutic diets to be prepared and assembled for meals.

OBJECTIVES: When you finish this lesson, you should be able to
a. describe procedures for receiving dietary changes and making correct changes
b. describe duties related to the tabulation of diets
c. describe the purpose and procedure for tabulating the meal census.

The nursing department of the hospital usually informs the dietary department of specific changes which the doctor orders in the diets of patients. The nursing department may either telepnone the dietary department to give the changes or send a member of the nursing staff to deliver diet changes in written form.

The following are sample forms which may be used to request dietary changes.

THERAPEUTIC DIET ORDER

Room ______________________ Date ______________________

Patient's Name ____

Attending Doctor ____

Diagnpsis ____

Diet Required ____

General ________ Liquid ________ Bland ________ Soft ________

Diabetic ________ Fat Restricted ________ Sodium Restricted ________

Patient is/is not to receive diet instruction.

Dr. ______________________

THERAPEUTIC DIET CANCELLATION
(to be sent in advance)

Room ______________________________ Date ____________________________

Patient's Name ____

Please cancel ________________________________ diet on ______________
(type of diet) (day)

with ____
(meal)

____
(Doctor in attendance)

Dr. ____________________________

The dietetic aide may be responsible for making the appropriate changes on the diet card and on the patient's tray. These changes should be made promptly and accurately to insure the welfare of the patient. Diets are frequently an important part of the patient's therapy. Accurately following directions for making diet changes also helps to maintain good relationships between the patient and the dietary department, the nursing and dietary departments, and the doctor and the dietary department.

TABULATION OF DIETS

Orders or lists of diets come to the dietary department from the nursing station. The dietetic aide organizes the diet orders into types of diets, such as general, soft, and diabetic. She then tabulates the number of each type of diet and marks each group with the correct tabulation. It is most important to be accurate in this tabulation to avoid confusion and delays in serving the trays to the patients.

When a patient who is on a special diet is to be dismissed from the hospital, a special diet list usually is prepared by the dietary department for his use at home. The dietetic aide may be assigned to type the diet list. She should take special care to be accurate and to give complete information.

Meal Census

The dietetic aide could be asked to compile a "meal census." The meal census is a record of the total number of persons served meals. This census is necessary to determine the cost per person of the food served. The meal census lists the number of patients, employees, and others served at the breakfast, noon, and evening meal. This information is recorded every day.

MONTHLY MEAL CENSUS*

B-Breakfast
N-Noon
E-Evening

Month:____________________

Date	Patients			Employees			Others			Totals Today			Total Meals	
	B	N	E	B	N	E	B	N	E	B	N	E	Today	To Date
1														
2														
3														
4														
5														
6														
-														
-														
31														

To use this form, enter the number of persons served each meal every day. In the column headed "Totals Today," total the number served that day at breakfast, noon, and evening meals. In the column headed "Total Meals," total all the meals served that day and enter the figure under the "Today" column. If you want a running total of the meals served during the month, add the "Total Meals" for "Today" to the "Total Meals to Date" from the day before. Enter this figure in the "To Date" column.

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*Adapted from United States Department of Health, Education, and Welfare. *A Guide to Nutrition and Food Service for Nursing Homes and Homes for the Aged.* Washington, D.C.: United States Government Printing Office, 1971. pp. 75.

Hospitals and nursing homes vary in their methods of taking the meal census. The dietetic aide may be asked to assist in tabulating such information. Accuracy in tabulating is extremely important since the figures are used in determining both the prices charged for meals and the food waste.

The meal census, purchase record, and inventory all contain information needed to calculate food costs. The advantage in knowing the food costs is to enable dietary personnel to compare them from month to month. To determine food costs, follow the steps given below:

	Inventory value at beginning of month----------------	$
ADD	Cost of all food purchased during month--------------	+
EQUALS	Total value of food available during month-----------	=$
SUBTRACT	Inventory value at end of month----------------------	-
EQUALS	Cost of raw food used during month-------------------	$
DIVIDE	By number of persons served 3 meals a day for month--	÷
EQUALS	Average raw food cost per person per day-------------	=$

* NOTE: To determine the number of persons served 3 meals a day for the month, divide 3 into the total number of meals served for the month.

A more complete method of food cost accounting involves figuring the total cost per person per day or the total cost per meal served. This includes the raw food cost, the expense of labor to prepare the food, the cost of gas and electricity, depreciation, and other costs of operating the food service department. A record of non-food supplies used in the food service department is also included in this cost.

QUESTIONS:

1. How are dietary changes usually issued?

2. Who issues dietary changes?

3. Why is it important that diet changes be made promptly and accurately?

4. Why is it important to tabulate accurately the number of the various kinds of diets being served at each meal?

5. Who, besides patients, are usually fed in the hospital food service area?

6. How does the dietary department aid the special diet patient when he leaves the hospital?

7. What is the meal census?

8. What is the purpose of the meal census?

9. How is the monthly raw food cost figured?
(Give three steps to follow to determine this cost.)

a.

b.

c.

10. After the monthly raw food cost is figured, how is the raw food cost per person per day figured?

11. In addition to food costs, give four factors that must be included when figuring the total cost per person per day.

a.

b.

c.

d.

ASSIGNMENTS:

I. Identify and list the correct procedures and forms used for diet changes at your training station. Study these procedures so that you can accurately perform them.

II. Outline the procedures used at your training station for the tabulation of diets.

III. Identify and list the procedures used at your training station for taking the meal census and obtaining food costs.

GROUP WORK:

I. Form small groups to compare and discuss the procedures used at different training stations for diet changes, for the tabulation of diets, for taking a meal census, and for obtaining food costs.

ANSWER SHEETS
FOR
STUDY QUESTIONS

ANSWER SHEET UNIT I-1

WHAT IS A DIETETIC AIDE?

SUBJECT: The Dietetics Profession

1. Dietetics is a profession in the health field which focuses on nutrition.

2. (Any five of the following)
   Interest in people
   Aptitude for science
   Management ability
   Good health
   Emotional stability
   Knowledge of food

3. g. Registered Dietician

4. a. Clinical Dietitian

5. b. Dietetic Assistant

6. h. Research Dietitian

7. f. Nutritionist

8. d. Educator Dietitian

9. c. Dietetic Technician

10. e. Food Service Supervisor

ANSWER SHEET UNIT I-2

WHAT IS A DIETETIC AIDE?

SUBJECT: Personal Characteristics

1. (Any six of the following)
   Appearance
   Voice
   Cooperation
   Work habits
   Accuracy
   Courtesy
   Dependability
   Health
   Initiative
   Promptness
   Self-control

ANSWER SHEET--UNIT 11-1

DIETETIC AIDE: A MEMBER OF THE DIETARY TEAM

SUBJECT: Laws, Policies and Regulations

1. a. A qualified dietitian must be on the staff.
   b. There must be an adequate number of employees to meet the dietary needs of patients.
   c. Personnel must be clean and neat.
   d. Personnel must have health examinations and food handlers' permits.

2. She is then able to fulfill her role as a member of the dietary team and assist in maintaining the established standards.

3. To insure delivery of quality food to the patient.

4. a. More people are needed at the time meals are served.
   b. More patients are to be fed at the noon hour.
   c. Dietary services must be available for a required number of hours.

ANSWER SHEET UNIT II-2

DIETETIC AIDE: A MEMBER OF THE DIETARY TEAM

SUBJECT: Interpersonal Relationships

1. a. Loyalty to your employer
   b. Ability to get along with other employees
   c. Giving your best performance to the job

2. When the aide is too ill to perform duties or has a communicable disease.

3. a. Take necessary precautions against infection.
   b. Get adequate rest.
   c. Eat appropriate foods.

4. Call the dietary office as soon as possible.

5. Confusion in meeting the work schedule and ill-will on the part of other employees may result.

6. Undue loafing, idleness, gossip, visiting with friends, horseplay, and disorderly conduct represent waste of time.

7. (Any 3 of the following)
   Patient Food Service
   A.M. Tray Assemblers
   P.M. Tray Assemblers
   Dining Room Assistants
   Relief Workers

8. Clerical Workers
   Assistant Director of Therapeutic Dietetics

ANSWER SHEET UNIT II-3

DIETETIC AIDE: A MEMBER OF THE DIETARY TEAM

SUBJECT: Self-evaluation

1. a. An honest look at yourself.
   b. A desire to improve.

2. developing good work habits in order to be successful

ANSWER SHEET UNIT III-1

DIET THERAPY

SUBJECT: Dietary Problems of the Sick and Aging

1. a. Physical needs
   b. Social needs

2. a. Living away from family and friends.
   b. Institutional living.
   c. Dependency on others.
   d. Different foods and eating environment.

3. a. He may loose interest in food and not eat enough.
   b. He may eat too much.

4. He is less active at this age than when he was younger.

5. a. Nationality
   b. Religious influences
   c. Regional influences
   d. Economic influences

6. a. Considering the patient's food preferences helps him accept more of the foods that are served to him.
   b. Considering the patient's food preferences gives him the feeling that someone cares about him.

7. The resident who is able to walk and is not bedridden.

8. c. Tell the training sponsor the feelings expressed by Mr. Jones.

ANSWER SHEET--UNIT III-2

DIET THERAPY

SUBJECT: The Basic Four Food Groups

1. c. Milk Group
2. b. Meat Group
3. b. Meat Group
4. d. Vegetable and Fruit Group
5. a. Bread and Cereal Group
6. b. Meat Group
7. c. Milk Group
8. a. Bread and Cereal Group
9. d. Vegetables and Fruit Group
10. a. Bread and Cereal Group
11. 2 or more 8 oz. cups daily for adults; 4 or more 8 oz. cups for teenagers; and 3 or more 8 oz. cups for children (6 oz. cups for some children under 8)
12. 4 or more servings.
13. 2 or more servings.
14. 4 or more servings.
15. Basic Four Food Guide

ANSWER SHEET--UNIT III-3

DIET THERAPY

SUBJECT: Nutrients

1. nutrition
2. nutrients
3. body building
4. carbohydrates
5. amino acids
6. fats
7. fat-soluble vitamins
8. cholesterol
9. complete proteins
10. minerals
11. water-soluble vitamins
12. trace minerals
13. iodized salt
14. water
15. malnutrition
16. cellulose
17. g. Vitamin A
18. c. Iodine
19. a. Calcium
20. i. Vitamin K
21. b. Carbohydrates
22. j. Vitamin D
23. f. Protein

24. d. Iron

25. h. Vitamin B Complex

26. e. Phosphorous

27. i. Vitamin C

ANSWER SHEET--UNIT III-4

DIET THERAPY

SUBJECT: Nutrition for Persons of Various Ages

1. activities; size; age; stage of growth
2. calorie or kilocalorie
3. metabolism
4. calories or kilocalories
5. milk; iron-rich foods
6. increase in activity; a rise in basal metabolism
7. weight control
8. less

ANSWER SHEET--UNIT III-5

DIET THERAPY

SUBJECT: Planning Nutritious Meals

Meal	Milk and Milk Products	Fish, Eggs and Meat	Fruits and Vegetables	Bread and Cereals
BREAKFAST	Milk	Scrambled Eggs Bacon	Orange juice	Dry Cereal Whole Wheat Toast
LUNCH		Fried Chicken Breast	Buttered Squash Tossed Salad	Buttered Rice Lemon Cake Pudding Hot Bread
DINNER	Cottage Cheese Milk		Asparagus Fresh Fruit Ambrosia	Italian Spaghetti Hot Bread

2. Yes

3. a. Looks attractive and tastes good
   b. Provides the necessary nutritional requirements
   c. Satisfies the tastes and needs of individuals
   d. Is within the budget of the institution

4. bedtime nourishment

5. menu planning form

6. general diet

7. cycle menus
8. b. Pureed spinach
9. a. Ice cream soda
10. b. Baked apple
11. b. Replace cauliflower with green beans

ANSWER SHEET--UNIT III-6

DIET THERAPY

SUBJECT: General and Therapeutic Diets

1. b. Diet supplement

2. f. Metabolism

3. h. Restricted diet

4. a. Calorie

5. i. Sodium

6. d. Exchange list

7. k. Therapeutic diet

8. e. General diet

9. c. Diet therapy

10. g. Nutritionally adequate

11. postoperative

12. cardio-vascular

13. convalescent

14. edema

15. calorie-restricted

16. Alternate choices are given for various items on the menu.

17. to give the patient a wider variety of food selection

18. Foods in the clear-liquid diet are clear in color and those in the full-liquid diet are not. A wider variety of foods is available in the full-liquid diet. A clear-liquid diet is nutritionally inadequate, but a full-liquid diet can be nutritionally adequate.

19. The soft diet contains soft textured foods which are easily digested; whereas, a general diet has no limitations in texture or digestion.

20. Limitations of a diabetic diet include restricting types and amounts of food intake.

21. The purpose of the exchange list is to enable one to make food substitutions within food groups in order to have a more satisfying, varied diet.

22. Restricted-calorie and controlled-calorie diets

23. The restricted-calorie diet is primarily for weight reduction; whereas, the controlled-calorie diet is for maintaining weight.

24. Chicken, potatoes, and peaches

25. Salt and foods high in salt content are limited in the sodium-restricted diet.

26. a. Bland diet
    b. Regular or general diet
    c. Calorie-restricted diet
    d. Soft diet

27. a. shrimp, white pepper, catsup, cauliflower, ham, candy, sweet potatoes
    b. shrimp, catsup, ham
    c. plain cake, candy, sweet potatoes

28. Waldorf salad and steak

ANSWER SHEET--UNIT IV-1

SMALL EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Hand Utensils

1. Cook's, utility, or kitchen fork
2. Sandwich spreader
3. Melon ball scoop
4. Pie knife
5. Spatula
6. Hamburger turner
7. b. Sandwich spreader
8. e. Hamburger turner
9. d. Spatula
10. d. Spatula
11. a. Cook's, utility, or kitchen fork
12. c. Pie knife or server
13. a. Cook's, utilty, or kitchen fork
14. d. Spatula
15. Ladle: used to portion liquids or emulsions.
16. Pastry brush: used to spread melted butter or sauce.
17. Pierced serving spoon: used to serve foods which need to be drained.
18. Plate scraper: used to scrape dishes and mixing bowls.
19. Tongs: used to serve foods without touching them.
20. Wire whip: used for stirring or whipping foods.

ANSWER SHEET--UNIT IV-2

SMALL EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Knives

1. a. Boning
   b. Bread
   c. Fruit and Salad
   d. French
   e. Paring
   f. Butcher
   g. Peeler
   h. Slicer

2. g. Slicer, or b. Bread

3. f. Peeler

4. a. Boning, or c. Fruit and Salad

5. d. French

6. b. Bread

7. c. Fruit and salad

8. a. Boning

9. g. Slicer

10. d. French

11. e. Paring

12. g. Slicer

13. a. Boning

14. f. Butcher

15. b

16. a

17. b

18. b

19. b

20. a

ANSWER SHEET--UNIT IV-3

SMALL EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Can Opener

1. To remove lids from cans ranging from small through institutional sizes.
2. The nicks and grooves may create metal shavings that could drop into the food.
3. To remove food deposits that may cause off-flavors and odors in food and to prevent interference with the operation of the can opener.

ANSWER SHEET--UNIT IV-4

SMALL EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Dippers

1. c. Handle

2. d. Bowl

3. a. Vane

4. b. Lever

5. a. 10 T.
   b. 1/2 c.
   c. 6 T.
   d. 1/3 c.
   e. 1/4 c.
   f. 3 T.
   g. 2 2/3 T.
   h. 2 T.

6. h. 30

7. f. 24

8. c. 20

9. b. 16

10. e. 12

11. g. 10

12. a. 9

13. d. 6

14. The number of the dipper size is the same as the number of servings per quart.

		NUMBER SERVINGS PER QUART	SIZE IN OUNCES
15.	a.	12	2 1/3 to 3
	b.	16	2 to 2 1/4
	c.	6	6
	d.	10	3 to 4
	e.	8	4 to 5
	f.	24	1 1/2 to 1 3/4
	g.	20	1 3/4 to 2
	h.	30	1 to 1 1/2

16. e. #16

17. c. #10

18. a. # 6

19. f. #20

20. b. # 8

21. g. #24

22. d. #12

23. h. #30

24. a. Wash in warm water.
    b. Use recommended amount of detergent.
    c. Rinse in clear water with recommended amount of disinfectant.
    d. Allow to drain and air-dry.

ANSWER SHEET--UNIT IV-5

SMALL EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Weighing and Measuring Equipment

1. Move a straight knife or spatula across the top edge of measuring container to remove the excess ingredient.

2. The straight edge metal cup gives greater accuracy when measuring dry and solid ingredients. The glass cup with the lip is more practical for measuring liquids, as it is more accurate and prevents spillage.

3. Brown sugar should be packed firmly to insure the accuracy of the measurement. When loosely packed, the measured amounts vary.

4. Fill the bowl of the 1/4 teaspoon and level it off. Using the tip of a knife, make a lengthwise cut the length of the spoon; remove half of the allspice onto waxed paper. 1/8 teaspoon will be left in the spoon.

5. To make it light and to remove lumps.

6. A standard measure always provides the same amount of the ingredient. This helps to insure products of consistent quality.

7. Because it is faster and more accurate.

8. c. Portion scale

9. d. Spring-type scale

10. a. Baker's scale

11. b. Balance scale

ANSWER SHEET--UNIT V-1

LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Cleaning and Disposal Equipment

1. a. Scraping
   b. Prewashing
   c. Racking
   d. Washing (in machine)
   e. Rinsing
   f. Sanitizing
   g. Air-drying
   h. Clean storage of the utensils until the next use

2. single tank machines; multiple tank machines

3. Upside down in dish machine racks so that the wash water can get in and the rinse water can drain out.

4. Load all of one size and type of dish in one rack.

5. Load the rack loosely, mixing knives and forks with the spoons so that they do not nest.

6. 140° - 160° F. (60° - 71° C.).

7. a. Soaking
   b. Fresh-water rinsing
   c. Hot water or germicide rinsing

8. b. a garbage disposal unit.

9. a. activated.

10. c. gradually.

11. b. all food has been ground.

12. a. in the walk-in refrigerator.

ANSWER SHEET--UNIT V-2

LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Cold Storage Equipment

1. circulate
2. cover
3. frost
4. coldest
5. 1/4
6. daily
7. baking soda
8. 0° F. (-18° C.)
9. wrap
10. first
11. 3/8-inch to 1/2-inch

ANSWER SHEET--UNIT V-3

LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Beverage Equipment

1. b. Twice weekly
2. c. Both a and b
3. c. Both a and b
4. b. remove sizing.
5. a. rinse the filter in hot water.
6. b. store the filter in clean container with fresh cold water.
7. c. when undesirable odors persist.
8. a. an urn cleaner and a stiff brush.
9. c. a brush and hot water.
10. a. soaking all parts in a cleaner.
11. b. fresh, cold water.
12. a. dumped immediately after the coffee is brewed.
13. c. improve the flavor by giving the coffee a unified blend.
14. b. cold water.
15. c. the top bowl of the vacuum coffee maker.
16. a. boiling.
17. a. heat.
18. c. reduce the heat.
19. b. vacuum created in the lower bowl.
20. b. removed.
21. Cleanliness of the coffee maker is essential because the taste and flavor of coffee is affected by leftover coffee deposits.
22. Metallic pots give a metallic taste to the beverage.

23. a. Ice cubes
    b. Flaked ice
    c. Cracked or chipped ice

24. Use a scoop to remove ice from the bin.

25. Melt the ice completely and drain from the bin. Examine the bin carefully before filling with ice.

ANSWER SHEET--UNIT V-4

LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Food Cutting Equipment

1. a. Be sure cord is dry and free from grease.
   b. Be sure hands are dry.

2. unplugged

3. At zero.

4. Hot detergent solution.

5. g. "On and Off" switch

6. d. Food carriage

7. f. Gauge plate

8. i. Scrap tray

9. a. Blade control indicator

10. h. Receiving tray

11. c. Blade or slicer knife

12. b. Blade guard

13. e. Food holder

14. a. See that the machine is completely assembled with all parts in place.
    b. See that the clamp nuts are turned to hold bowl guard in place.

15. a. Gradually.
    b. 2/3 full.
    c. Never use fingers to push food under blades.

16. Scrape food down from the outer edge toward the bottom of the bowl.

17. The knives continue to rotate for several seconds after the machine is turned off.

18. Prepare the chopper for the next continuous operation or clean it.

19. A large spoon.
    Opposite to direction the bowl is rotating.

20. Meat with bones or gristle will damage the knives and the gears.

21. a. Replace guard.
    b. Attach bowl to base.
    c. Reattach knife blades to shaft.
    d. Drop guard into position.

ANSWER SHEET--UNIT V-5

LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Mixing Equipment

1. a. Attachment socket
2. e. Bowl raising wheel or lever
3. c. Bowl
4. b. Beater shaft
5. g. "Off and On" switch
6. f. Gear or speed control
7. d. Bowl support
8. b. Flat beater
9. d. Wire whip
10. a. Dough hook
11. c. Pastry knife
12. b. Flat beater
13. c. Pastry knife
14. d. Wire whip
15. a. Dough hook
16. d. Wire whip
17. c. Pastry knife
18. b. Flat beater
19. High speed blending, pulping, mixing, or reducing of animal tissue, vegetables, or fruits.
20. a. Do not drop spoons, spatulas, or scrapers into machine while motor is on.
    b. Be sure lid is fastened tightly.
    c. Do not put very coarse foods or large pieces of ice in jar.
    d. Disconnect cord when machine is not in use.

ANSWER SHEET--UNIT V-6

LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE

SUBJECT: Holding and Serving Equipment

1. b. order in which it will be placed on plate.
2. c. a temperature to hold food at 140° F. (60° C.).
3. a. immedately after the service is completed.
4. b. 170° - 180° F. (77° - 82° C.).
5. a. Keeps food at proper storage temperature
   b. Preserves the range-fresh flavor
   c. Eliminates the waste of food
6. b. False
7. a. True
8. a. True
9. b. False
10. a. True
11. ice
12. detergent
13. f. Thermal-tray system
14. d. Roll warmer
15. e. Thermal dish trays or plate holders
16. b. Hot and cold carts
17. a. Composition plate holder and dome cover
18. c. Infrared lamps

ANSWER SHEET--UNIT VI-1

LARGE EQUIPMENT FOR COOKING FOOD

SUBJECT: Toasters

1. a. the heating element which is insulated in a frame.
2. d. all of these.
3. a. a soft, damp cloth.
4. b. a non-abrasive cleaner.
5. c. electrical element.
6. c. disconnect it.
7. a. dry.
8. Wipe outside, remove crumbs, remove toast chutes, and clean base.
9. A non-abrasive cleaner.
10. a. Keep fingers away from electrical elements when loading the toaster.
    b. Unplug toaster when not in use.

ANSWER SHEET--UNIT VI-2

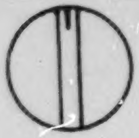
LARGE EQUIPMENT FOR COOKING FOOD

SUBJECT: Surface Cooking Equipment

1. Only until the food starts to cook

2. Before turning on the burner valve

3.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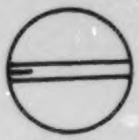
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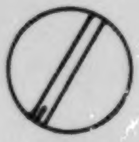
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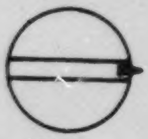
4. a. Ventilation
   b. Fire control
   c. The removal of smoke, grease, cooking vapors, and odors from the cooking area

5. Seasoning is the build-up of shortening on the grill until a slick surface is formed.

6. Heat is brought to 300° F. (149° C.). A light film of unsalted shortening is spread over the grill with a clean, dry cloth. After 2 minutes, the grill is wiped clean. The process is repeated until a slick surface is formed. Excess shortening is wiped off.

7.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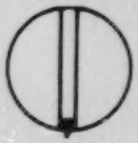
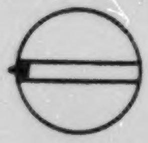

MEDIUM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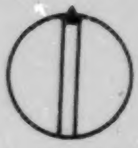

OFF

8. Meats, poultry, seafood, vegetables, and fruits.

9. The grid lever control.

ANSWER SHEET--UNIT VI-3

LARGE EQUIPMENT FOR COOKING FOOD

SUBJECT: Ovens

1. a. Turn directional heat control switch to "Medium" or "High."
   b. Set the thermostat at the desired temperature.
   c. Let the oven preheat.

2. To prevent loss of heat and to produce a better product.

3. That it would not heat any faster with a high temperature setting.

4. individual

5. a. Glass
   b. Paper
   c. Ceramics

ANSWER SHEET--UNIT VII-1

TECHNIQUES OF FOOD PREPARATION

SUBJECT: Quality Food Preparation

1. a. She did not read the recipe carefully before she began.
   b. She did not check to see that she had the necessary equipment.
   c. She did not apply terms in the recipe and so she beat the mixture instead of stirring it.
   d. She did not make herself a time schedule.

2. a. She did not read the recipe carefully before she began.
   b. She did not check to see that she had all the necessary ingredients.
   c. She did not make the addition for Blueberry Muffins.
   d. She did not check to see that she had the necessary equipment.

3. a. The information in the recipe failed to:
      (1) state the number of servings.
      (2) give the cooking temperature.
      (3) use familiar cooking terms.

   b. The use of a standardized recipe aids in producing products of consistent quality each time the recipe is used. It also saves time since all necessary information is included.

4. The ingredients and steps are written in the order in which they are used.

ANSWER SHEET--UNIT VII-2

TECHNIQUES OF FOOD PREPARATION

SUBJECT: Terminology Used in Food Preparation

1. a. Pan-fry----to cook in a small amount of fat
Sauté------to brown quickly in a small amount of fat, turning frequently

b. Dice-------to cut into small cubes
Mince------to cut or chop into very small pieces

c. Boil-------to cook in water or other liquid until bubbles rise continuously and break on the surface
Simmer-----to cook in liquid at a temperature of about 185° F. (85° C.), bubbles form slowly and break below the surface

d. Blend------to mix thoroughly two or more ingredients
Cream------to stir or beat one or more foods until smooth and creamy, usually applies to fat and sugar

e. Chill------to place in refrigerator until cooled to a temperature between 40° to 45° F. (4 to 7° C.)
Cool-------to lower the temperature

f. Boil-------to cook in water or other liquid until bubbles rise continuously and break on the surface
Parboil----to simmer until partially cooked

g. Beat-------to mix until smooth, using an up-and-over motion
Whip-------to rapidly beat cream, eggs, or gelatin dishes to incorporate air and increase volume

h. Cut--------to divide food into small irregularly shaped pieces
Cut-in-----to chop fat into small particles in dry ingredinets by using two knives or a pastry blender

j. Blanch-----to dip into boiling water, making the skins of fruit and nut meats easy to remove or to stop action of enzymes
Scald------to heat to a temperature just below the boiling point

2. c. Baste

3. o. Peel

4. m. Stir

5. h. Purée

6. a. Au gratin

7. j. Melt

8. e. Dilute

9. l. Steam

10. g. Poach

11. k. Sift

12. f. Garnish

13. i. Mash

14.

MEAT COOKERY	PREPARATION OF SALADS, VEGETABLES, AND FRUITS	SURFACE COOKING	BAKING AND PASTRY
bread baste braise broil marinate sear	blanch chop garnish grate mince peel scallop	boil fry simmer	blend cut-in cream mix sift whip

15. 3 lb.

16. 1 gal.

17. 9 lb.

18. 8 oz.

19. 1 1/2 qt.

20. 2 oz.

21. 3 to 4 oz.

22. 3 T., tb., or tbsp.

23. 3 gal.

24. 3 hrs.

25. 5 oz.

26. 2 c.

27. 2 c.

28. 2/3 c.

29. 1 1/2 T., tb., or tbsp.

30. 2 sq.

31. f.g.

32. 3 T., tb., or tbsp.

33. 1 t., ts., or tsp.

34. Substitute:

9 T. cocoa plus 3 T. fat for 3 sqs. chocolate

1 c. fresh milk plus 3 t. baking powder for 1 c. sour milk and 1 t. soda

1 3/4 c. all purpose flour for 2 c. cake flour

35. a. 1 c. reconstituted non-fat dry milk plus 2 t. fat = 1 c. milk
b. 6 T. cocoa and 2 T. fat = 2 sqs. chocolate
c. 1 3/4 t. cream of tartar = 2 T. corn syrup

36. a. Calorie
b. pound
c. 350 degrees Fahrenheit
d. cups
e. minutes
f. few grains
g. seconds
h. teaspoon
i. medium
j. tablespoons
k. tablespoons
l. hour
m. teaspoon
n. tablespoons monosodium glutamate
o. large
p. ounces
q. temperature
r. small
s. weight

37. a. 1 T.
b. 1 c.
c. 1 c.
d. 1 pt.
e. less than 1/8 t.
f. 1 qt.
g. 1 gal.
h. 1 lb.
i. less than 1/8 t.
j. less than 1/8 t.
k. 4 T.
l. 8 T.
m. 12 T.

38. a. 1 pt.
    b. 1 pt.
    c. 1 T. and 1 t.
    d. 1 1/2 lb.
    e. 1/4 c.

39. a. 2 1/4 c.
    b. 1 1/2 c.
    c. 1-6 oz. can
    d. 1-6 oz. can
    e. 1/2 gal. or 2 qt.

40. a. 30 lb.
    b. 1 1/2 lb.
    c. 3/4 c.
    d. 3 lb. 12 oz. or 3 3/4 lb.
    e. 2 lb. 4 oz. or 2 1/4 lb.
    f. 2 lb. 4 oz. or 2 1/4 lb.
    g. 6 lb.

41. a. 1 gal.
    b. 1 qt.
    c. 1 pt.
    d. 1 pt.
    e. 1 c.
    f. 1 c.
    g. 1 T
    h. 1 T.

42. a. 2 qt.
    b. 1/2 c.
    c. 1/2 c.
    d. 1 T.
    e. 3 c. or 1 1/2 pt.

ANSWER SHEET--UNIT VII-3

TECHNIQUES OF FOOD PREPARATION

SUBJECT: Convenience Foods

1. A partially prepared product or ingredient that requires less preparation at serving time.

2. (Any five of the following)
   Pre-cut portions of fish, meats, or poultry
   Frozen or fruits and canned vegetables
   Cleaned and packaged fresh chopped or shredded, peeled and cut fruit for use in salads and desserts, or as garnishes
   Cake and other baked-product mixes
   Soups, gravies and sauce bases
   Packaged individual portions of condiments and beverages

3. a. Freezing
   b. Freeze-drying
   c. Dehydration
   d. Canning

4. a. regular food.

5. c. lower priced food item.

6. b. 15 minutes.

7. d. food needed.

8. a. processed at the peak of nutritive value.

9. c. processing.

10. b. freezer and oven.

11. c. requires no inventory.

ANSWER SHEET--UNIT VII-4

TECHNIQUES OF FOOD PREPARATION

SUBJECT: Techniques of Portioning Food

1. that a specific size portion of each food is served.

2. management of the health care establishment.

3. a. Select the proper size and color of serving dish.
   b. Use of garnish.

4. (Any five of the following)
   Sugar
   Pepper
   Salt
   Crackers
   Cereal
   Milk
   Ice cream
   Catsup
   Mayonnaise

5. c. Gelatin Salad

6. d. Ice Cream

7. c. Gelatin Salad; e. Macaroni and Cheese Casserole

8. f. Meat

9. a. Bread; f. Meat

10. b. Cereal

ANSWER SHEET--UNIT VII-5

TECHNIQUES OF FOOD PREPARATION

SUBJECT: Work Simplification and Work Schedules

1. a. Plan and organize for work to be done.
   b. Plan the job itself.

2. The job of making work easier to do in a shorter period of time.

3. a. Take job apart, see how it is done.
   b. Change, eliminate, combine, or rearrange steps.
   c. Plan the job, avoiding unnecessary waste.

4. Physical and mental fatigue.

5. Use your mental ability to find ways to use less energy.

6. Work is done easily and quickly.

7. a. Get ready; set up equipment.
   b. Actual production.
   c. Put away and clean up.

8. a. Rule 1 or 2. Left hand places lettuce; right hand places peach halves. Move arms simultaneously and in opposite and symmetrical directions.
   b. Rule 4. Use touch of a finger.
   c. Rule 3. Use a continuous circular motion.

9. Gelatin salad would be prepared first because it needs time to set. The potato salad would probably be prepared second.

10. a. True

11. a. True

12. b. False

13. b. False

14. b. False

15. a. True

16. a. True

ANSWER SHEET--UNIT VIII-1

FOOD PREPARATION

SUBJECT: Beverages

1. a. level standard measurements.

2. c. steady, circular motion.

3. b. 185° F. (85° C.)

4. a. fresh, cold water.

5. a. If coffee is underbrewed, it is watery in appearance and taste.
   b. Overbrewing results in a bitter taste and a cloudy or muddy appearance.

6. a. Clear.
   b. Mild in flavor.
   c. Free from leaves.

7. It becomes bitter.

8. Tea is made properly by pouring fresh boiling water over tea leaves, and allowing the tea to steep for three to five minutes.

9. a. Rich chocolate flavor.
   b. Light to dark brown color.
   c. No sediment.
   d. Consistency of light cream.

10. a. Increase calorie intake.
    b. Help balance the patient's diet.
    c. Increase nourishment when the patient is not able to eat regular food.

11. blender, mixer, shaker, rotary egg beater

12. No, because it dilutes the juices too much.

ANSWER SHEET--UNIT VIII-2

FOOD PREPARATION

SUBJECT: Sandwiches

1. a. A crisp garnish.
   b. [illegible] oz. or 3 T. of filling.
   c. The filling should reach the edge of the bread, but should not spill out over the edges.
   d. Edges should be cut evenly, not ragged.
   e. Spread the bread with margarine or softened butter.

2. a two-stroke technique.

3. a. No higher than 3 sandwiches
   b. A moisture-proof wrap paper

4. a. Size and ingredients suited to the occasion
   b. Well-seasoned filling spread to the edges
   c. Firm-textured body
   d. Appetizing flavor
   e. Attractive garnishes and accompaniments

ANSWER SHEET--UNIT VIII-3

FOOD PREPARATION

SUBJECT: Cereals

1. a. Whole wheat
   b. Farina
   c. Rolled oats
   d. Rolled wheat
   e. Oat and wheat cereal

2. Stir the cereal slowly into boiling water.

3. Stir while it thickens.

4. a. Soft or tender in consistency
   b. Pleasing flavor
   c. Free from lumps
   d. Cereal grains retain original shape, but greatly enlarged

5. a. Sprinkle dry cereal into rapidly boiling water. Cook first over direct heat and then over boiling water.
   b. Combine cereal with cold water and then bring mixture to the boiling point.

ANSWER SHEET--UNIT VIII-4

FOOD PREPARATION

SUBJECT: Egg Cookery

1. Low to moderate temperatures because they are a protein food.

2. a. Golden-yellow, moist appearance
   b. Tender texture
   c. Good serving temperature
   d. Fresh, well-seasoned flavor

3. a. Cook in shell in water on top of the stove.
   b. Cook in shell in pressure steamer or steam-jacketed kettle.
   c. Cook out of shell in a pan in the oven.

4. By cooling the eggs in cold water immediately after cooking is finished.

5. Break egg into a saucer. Slip egg into a shallow pan of simmering water or milk. Simmer 3 to 5 minutes. Cover, remove from heat, and let stand 5 minutes or longer.

ANSWER SHEET--UNIT IX-1

FUNDAMENTALS OF FOOD SERVICE PROCEDURES

SUBJECT: Dining Room Service in Nursing Homes

1. a. Modified cafeteria
   b. Table service
   c. Family style
   d. Tray service

2. In table service, the food is served on the plates in the kitchen by dietary personnel. In family style service, the food is on the table in bowls and platters, and the patient serves his own plate.

3. They are inclined to overeat.

4. a. Increased sociability--patient feels more a part of the group.
   b. Increased interest in personal appearance.
   c. More acceptance of food they would not eat if they were alone.
   d. Increased exercise.
   e. Improved morale.

5. a. Gives personal satisfaction in making food choices.
   b. Helps the patient feel that he is capable of helping himself.

ANSWER SHEET--UNIT IX-2

FUNDAMENTALS OF FOOD SERVICE PROCEDURES

SUBJECT: Tray Line Assembly

1. So that the tray can be assembled in as short a time as possible in order to get a quality product to the patient.

2. a. Setting up trays.
   b. Setting up the serving line.
   c. Working the hot or cold food station on tray line.
   d. Placing the appropriate food on general and modified diet trays.
   e. Delivering the loaded food cart.
   f. Delivering the trays and picking up the trays.

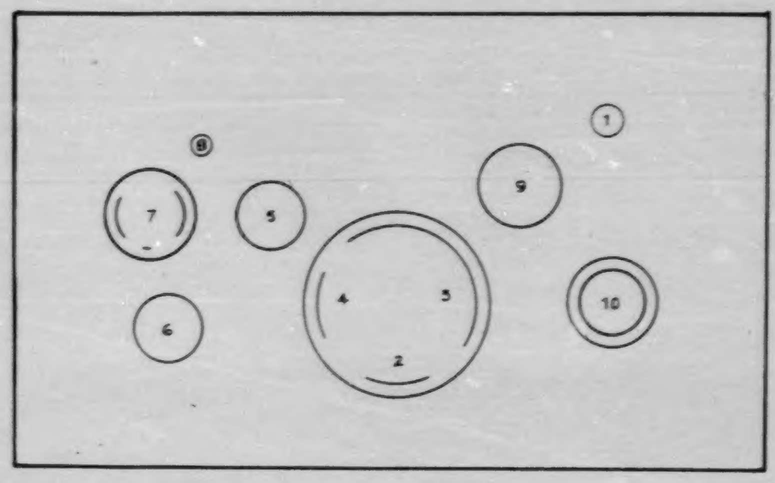
3. a. Tray cover
   b. Tray card
   c. Napkin
   d. Salt, pepper, sugar (if used)
   e. Bread and butter (if used)
   f. Silverware
   g. Cold foods
   h. Hot foods
   i. Cup and saucer or beverage glass

4. Small tray; the size of the tray used should be suitable for the food to be served.

5. a. Patient's name
   b. Patient's room number
   c. Type of diet

6. a. Setting up the tray
   b. Serving cold foods
   c. Serving hot foods

7. Placement of items on the menu is as follows:



8. Tray cover, tray card, salt, pepper, sugar, sacked silverware, napkin, and cup and saucer for coffee.

9. (Any five of the following)
   cream
   milk
   bread
   butter
   salad
   fruit
   juices
   some desserts

10. 175° to 180° F. (79° to 82° C.).

ANSWER SHEET--UNIT IX-3

FUNDAMENTALS OF FOOD SERVICE PROCEDURES

SUBJECT: Food Distribution to Patients

1. decentralized; centralized

   Decentralized--the tray is prepared away from the kitchen service area.
   Centralized----the tray is prepared at one central point and then delivered to the patients' rooms.

2. A portable hot-food table.

3. Getting food to the patients while the food is still at the correct temperature--the time lag between the preparation and serving of the food.

4. (Any four of the following)
   Food is served at proper temperatures.
   Patients may select their diets just before the meal is served.
   Patients may have the size portions they desire.
   Food waste reduced.
   Space used for Floor Kitchens may be used for other purposes.

5. a, d, e, f

6. a. Tray trucks
   b. Mobile units

7. Pyrex dishes are pre-heated in infrared ovens, placed in an insulated container, filled with the hot food, sealed, and placed on trays on tray trucks for delivery to the patients' rooms.

8. No, much depends on the personnel and the conditions within different hospitals.

9. a. If the patient is on a special diet, not eating his food could complicate his illness.
   b. The dietary department must be made aware of poorly prepared food so that corrective measures can be taken.

10. a. It eliminates the need for sterilization.
    b. It eliminates the danger of cross-infection.

ANSWER SHEET--UNIT X-1

SAFETY

SUBJECT: Safety Precautions

1. Do not leave knives on work tables or in the sink.
2. Place articles securely on the shelf so they will not fall off.
3. See that electric cords are in good repair.
4. Use a safe ladder and avoid over-reaching.
5. Promptly report any hazards such as broken floor boards, tiles, worn mats, or traffic obstructions.
6. Always dry hands before touching electrical equipment.
7. Turn handles of cooking utensils away from the edge of the stove.
8. Clean up wet or greasy spots promptly.
9. learn safe habits; practice safe habits; never fall back into old, careless habits
10. safety features such as entrances and exits for easy flow of traffic; fireproofing and fire equipment; and proper arrangement and installation of equipment.
11. people that have many accidents usually caused by carelessness or lack of physical coordination.
12. slips and falls; cuts; burns; strains from lifting
13. fatigue

ANSWER SHEET--UNIT X-2

SAFETY

SUBJECT: Fire Safety

1. deep-fat fryers; ranges; broilers
2. Baking soda or salt

ANSWER SHEET--UNIT XI-1

SANITATION

SUBJECT: Food Contamination and Food-Borne Illnesses

1. Hands that touch the hair become contaminated by the organisms which collect in the hair. Hair nets or caps are worn to keep hair from frequent contact with hands and food.

2. 40° - 120° F. (5° - 50° C.).

3. Any type of disease or illness caused by taking into the body contaminated food and drink.

4. b. False

5. Improperly cooked shellfish; poultry; eggs; egg products; dairy products; meats; salads with mayonnaise or cream dressings; foods contaminated by pests and unwashed hands.

6. a. In nasal discharges or local skin infections (acne, pimples, boils, scratches, and cuts)
   b. They produce a poison.
   c. Refrigerate moist foods during storage periods; minimize use of hands in preparation. Exclude unhealthy food handlers (having pimples, boils, and other obvious infections).
   d. Cooked ham or other meat; chopped or pulverized food; cream-filled or custard pastries; other dairy products; Hollandaise sauce; bread pudding; potato salad; chicken, fish, and other meat salads; "warmed-over" food.

7. a. In soil and dirt
   b. Improperly canned, non-acid foods and meats (Also in sealed packages of meats improperly handled)

8. Botulinum.

9. a. Those caused by foods containing harmful bacteria.
   b. Those caused by poisons produced by bacteria in the food.

10. Poultry products should not be left at room temperature more than four hours. The casserole should have been refrigerated.

11. Yes, because ham and poultry mixtures need to be refrigerated to prevent the growth of bacteria.

12. a. The stew should have been placed in shallow pans.
    b. The stew should have been refrigerated immediately.

13. Staphylococcus.

ANSWER SHEET--UNIT XI-2

SANITATION

SUBJECT: Sanitation Codes

1. Food and Drug Administration; Public Health Service
2. United States Department of Agriculture
3. State Department of Health; City Health Department
4. sanitation
5. antiseptic
6. sanitation codes

ANSWER SHEET--UNIT XI-3

SANITATION

SUBJECT: Procedures for Dishwashing

1. 170° - 190° F. (82° - 88° C.).
2. washing, rinsing, sanitizing
3. germicides; sanitizers
4. detergents
5. a. Scrape and stack soiled dishes for washing.
   b. Wash.
   c. Rinse.
   d. Air-dry.
6. Upside down. The wash water can get in and the rinse water can drain out.
7. a. Allow silver to air-dry a few minutes.
   b. Unload onto a clean dry cloth on the silver sorting table.
   c. Pick up silver by handles and place in silver trays.
8. bacteriological

ANSWER SHEET--UNIT XI-4

SANITATION

SUBJECT: Cleaning Versus Sanitizing

1. clean; sanitary

2. When sanitation is a way of life, it is something that is done as an ordinary procedure. Its importance is recognized and everyone accepts his share of the responsibility for maintaining high standards of cleanliness and sanitation.

3. cleanliness

4. a. to prevent disease
   b. to prevent food poisoning
   c. to prevent food spoilage
   d. to prevent off-odors and off-flavors

5. a. Equipment may not function properly.
   b. The quality of the product may be affected.
   c. Maintenance and repair costs will be increased.

6. bacteria

7. a. Store equipment, dishes, pots and pans, and tools in enclosed areas or upside down.
   b. Cover any leftover food.

8. equipment

9. Cleaning indicates absence of soil; sanitizing indicates absence of harmful bacteria, molds, fungi or yeast.

10. water; friction; a wetting agent (soap or detergent).

11. a. Chemicals.
    b. Temperature.

12. To ensure that all necessary cleaning and sanitizing is done.

13. b. False

14. b. False

15. b. False

ANSWER SHEET--UNIT XI-5

SANITATION

SUBJECT: Pest Prevention

1. roaches, flies, ants, and rodents (rats and mice)
2. bacteria.
3. Pest control measures
4. pest control measures; proper sanitation; good housekeeping
5. report the information to the supervisor immediately.

ANSWER SHEET--UNIT XI-6

SANITATION

SUBJECT: Care of Furniture, Floors, and Surface Areas

1. clean
2. running your hand over the table top
3. once
4. equipment
5. figure 8
6. d. Hardwood
7. f. Terrazzo
8. g. Vinyl Tile
9. d. Hardwood
10. e. Rubber Tile
11. a. Carpet
12. f. Terrazzo
13. c. Clay Tile
14. d. Hardwood

ANSWER SHEET--UNIT XII-1

BASIC SKILLS IN MANAGEMENT

SUBJECT: Dietary Office Procedures

1. Guides, dividers, folders, tabs, labels, and colors.

2. b. Subject

3. a. Alphabetical

4. d. Numeric

5. a. Alphabetical

6. b. Subject

7. c. Geographic

8. a. Alphabetical

9. At the end of each month or accounting period.

10. All items on hand, raw or cooked.

11. Each unit is allotted a cost value, which multiplied by the total number of units on hand, gives the total value of those units.

12. No.

13. a. Prepare typed sheets listing items.
    b. List items alphabetically.
    c. Take inventory--usually two people work together with one checking stock and the other checking the list.
    d. Record items by their location as they are stored, not by their location on the sheet.

14. On the permanent inventory record.

15. a. To be sure it is accurate.
    b. To find substantial variances.
    c. To determine reasons for such variance.

ANSWER SHEET--UNIT XII-2

BASIC SKILLS IN MANAGEMENT

SUBJECT: Public Relations in Dietary Department

1. c. report to head dietitian for directions.

2. c. admit that she is responsible and accept the consequences.

3. d. defend the dietary department when she can and remain silent when she cannot.

4. a. Does not answer phone promptly.
   b. Keeps caller waiting.
   c. Holds mouthpiece too far from her mouth.
   d. Does not speak clearly.

5. a. Does not identify herself.
   b. Gives insufficient explanation.
   c. Doesn't offer a choice between waiting or being called back.
   d. Has no pad on which to write.
   e. Demands, "Who's calling?".
   f. Left phone without explaining why.
   g. Does not repeat information for accuracy.

6. a. Does not remain calm and blames someone else.
   b. Volunteers no information.
   c. Offers no assistance to caller.

ANSWER SHEET--UNIT XII-3

BASIC SKILLS IN MANAGEMENT

SUBJECT: Dietary Records

1. By telephone or in written form.
2. The nursing department or orders from the doctor.
3. To insure the welfare of the patient.
4. To avoid confusion and delays in serving the patients.
5. Doctors, nurses, food service staff, and other hospital employees.
6. The dietary department prepares a special diet list for the patient to take home.
7. A record of the number of persons served meals.
8. To determine the cost per person of the food served.
9. a. Determine inventory value at beginning of month.
   b. Add cost of food purchased for the month.
   c. Subtract inventory value of food on hand at end of the month. Result is the raw food cost for the month.
10. Divide raw monthly food cost by number of persons served three meals a day for the month.
11. a. Cost of labor
    b. Cost of operating dietary service
    c. Cost of gas and electricity
    d. Depreciation

UNIT TESTS

UNIT I TEST

WHAT IS A DIETETIC AIDE?

Select the letter of the phrase which correctly completes the statement. Place the letter in the blank next to the statement. Choose only one answer for each item.

_____1. The opportunities for trained personnel in the health service profession are
- a. slowly expanding.
- b. rapidly expanding.
- c. decreasing.

_____2. Generally, dietetic aides at the entry level are not expected to
- a. follow diet instructions when filling plates and trays.
- b. assist in the management of the dietary office.
- c. plan meals for the residents or patients.

_____3. People receiving services of dietary departments include
- a. patients in hospitals.
- b. patients and residents in nursing homes.
- c. patients and residents in hospitals and nursing homes.

_____4. Which of the following qualities will not contribute to success as a dietetic aide?
- a. Take instructions and criticism from others.
- b. Show little concern for the welfare of others.
- c. Enjoy working with people.

_____5. A clinical dietition
- a. plans normal and therapeutic diets for patients as prescribed by doctors.
- b. coordinates dietetic education programs in hospitals affiliated with medical centers and universities.
- c. plans and carries out nutrition studies for a medical center.

_____6. A research dietitian does not
- a. plan and carry out nutrition studies for a medical center.
- b. plan normal and therapeutic diets for patients as prescribed by doctors.
- c. conduct research to improve the methods of processing, the quality of foods, the flavor, and the nutritive values.

_____7. The initials "R.D." following the dietitian's name indicates that the person is a
- a. Research Dietitian
- b. Registered Dietetic
- c. Registered Dietitian

UNIT II TEST

DIETETIC AIDE: A MEMBER OF THE DIETARY TEAM

Select the letter of the phrase which correctly completes the statement. Place the letter in the blank next to the statement. Choose only one answer for each item.

_____1. Split or staggered shifts enable the dietary department to
   a. hire fewer people and still serve the patients.
   b. provide dietary service for the required number of hours.
   c. reduce the cost of food service.

_____2. A guiding principle for the dietary department could be
   a. feeding the patient is most important; the appearance and taste of food are secondary.
   b. the patient needs to eat what is good for him.
   c. the patient should receive food of high quality.

_____3. Self-evaluation is
   a. unnecessary if conferences are held with one's employer.
   b. a means of improving work habits and attitudes.
   c. recommended primarily for beginning employees.

For Items 4 and 5, write the letter of the type of shift which fits the description.

DESCRIPTION	TYPE OF SHIFT
_____4. Employee works from 9:30 to 1:30 and then from 4:00 to 7:00	a. split b. staggered c. regular
_____5. One employee works from 6:00 a.m. to 3:00 p.m. and another employee works from 11:00 a.m. to 8:00	

Which of the types of behavior described in Items 6 through 8 would lead to success as a dietetic aide?

Write a in the blank provided if you would recommend the behavior.
Write b in the blank provided if you would not recommend the behavior.

_____6. During the first week as an assistant in the dietary office, Pat was enthusiastic about her work. As the weeks passed, her tasks became routine and she spent a lot of time chatting with the other employees to add interest to her job.

_____7. Mary does a good job when making sandwiches and can be depended upon to do the work assigned. When she does not agree with the directions she is given, she tells the supervisor how it should be done.

_____8. Bill's co-worker is rather slow, so Bill sometimes helps her finish a job, even though this is not part of his assignment.

UNIT III

DIET THERAPY

Select the letter of the phrase which correctly completes the statement. Place the letter in the blank next to the statement. Choose only one answer for each item.

_____1. People moving into nursing homes must adjust to
- a. institutional living.
- b. more independence from others.
- c. limited contact with people.

_____2. Eating habits of the elderly may change because of
- a. increased nutritional requirements.
- b. increased sensitivity to taste and smell.
- c. decreased physical activity.

_____3. Food for patients in nursing homes
- a. helps to satisfy both social and nutritional needs.
- b. is important primarily from the viewpoint of meeting nutritional needs.
- c. has little to do with the patient's emotional adjustments.

_____4. Many factors influence eating behavior. Which of the following statements is true?
- a. A person will not eat to overcome unhappiness or nervousness.
- b. Food cannot serve as a substitute for security or love.
- c. Emotional stress will cause a person to eat.

_____5. A factor which does not contribute to the food habits and customs of families is their
- a. ethnic groups.
- b. nutritional needs.
- c. economic levels.

_____6. A patient's food preferences should be
- a. ignored because it would be impossible to please everyone.
- b. observed because this may improve his eating habits.
- c. ignored because it is important that he eat what is good for him.

_____7. The Basic Four food groups consist of
- a. milk, meat, vegetables and fruit.
- b. milk and cereal, vegetables and fruit, meat, and bread.
- c. milk, meat, vegetables and fruit, bread and cereal.

_____8. The recommended servings of milk needed for teenagers to meet their daily requirements include
- a. 4 or more 8 oz. cups.
- b. 3 or more 8 oz. cups.
- c. 2 or more 8 oz. cups.

____9. The recommended servings of meat to meet daily requirements include
a. 1 serving.
b. 2 or more servings.
c. 2 to 3 oz.

____10. Some good sources of vitamin C are
a. citrus fruits.
b. fish liver oils.
c. green, leafy vegetables.

____11. Which of the following is not a function of vitamin A?
a. Helps eyes adapt to darkness.
b. Promotes unblemished skin.
c. Helps in the clotting of blood.

____12. The essential nutrients needed by the body are
a. proteins, carbohydrates, and vitamins.
b. proteins, carbohydrates, fats, vitamins, and minerals.
c. proteins, vitamins, and minerals.

____13. Essential amino acids are found in complete proteins, such as
a. corn, navy beans, peas, cereal grain, and gelatin.
b. milk, eggs, cheese, meat, fish, and poultry.
c. meat, poultry, fish, cereal grains, peas, and navy beans.

____14. Water is an important food element. Which of the following statements about water is not true?
a. The average person needs 6 to 8 glasses of water daily.
b. The need for food is more important than the need for water.
c. About three-fourths of the body weight is water.

____15. Which of the following is not true about the requirements for the diet of a pregnant woman.
a. Include more milk and iron-rich foods in the diet.
b. Requirements are the same as the diet for her family.
c. The diet may include vitamin or mineral supplements.

____16. An important factor to remember when a child is learning to feed himself is to
a. stress good eating habits.
b. emphasize spills and accidents.
c. have patience and maintain control.

____17. When planning meals for teen-agers, you should consider the fact that
a. a teen-age girl needs more iron-rich foods than a teenage boy.
b. overweight teenagers need the same amount of foods as other teens.
c. the energy needs of a teen-age girl are the same as those of a teen-age boy.

____18. Which of the following statements does not apply to the nutritional problems of an adult?
    a. A person should maintain his normal weight at age 25 for the rest of his life.
    b. A diet guideline to follow is "add more calories as one adds more years."
    c. Adults require less calcium and protein than adolescents.

____19. Which of the following problems might you encounter in working with senior citizens?
    a. A difference in basic nutritional requirements.
    b. Maintainence of a high calorie intake.
    c. A lack of interest in food.

____20. The dietetic aide should understand the principles of meal planning because
    a. meal planning is one of the duties of the dietetic aide.
    b. patients may ask questions regarding the food served to them.
    c. the training sponsor will ask for advance menu plans.

____21. To make the job of meal planning easier, you should not
    a. ignore foods on hand in the storeroom and in the refrigerator.
    b. review the menus for the past week.
    c. consider foods that are available according to the season.

____22. Modified diets are diets in which
    a. the patient's food preferences are added to the general diet.
    b. substitutions are made to the general diet because selected foods are not available.
    c. prescribed substitutions are made to the general diet.

____23. Some health care institutions use cycle menus which
    a. end advance menu planning.
    b. save time in menu planning.
    c. can be used over and over without change.

____24. Which of the following definitions is correct?
    a. A general diet is one which includes diet supplements to improve the diet.
    b. A therapeutic diet is one which is used to cure or improve the health of a patient.
    c. An exchange list is one which divides foods into the Basic Four food groups.

____25. Which of these diets can be followed for a limited time only because it is nutritionally inadequate?
    a. Soft diet.
    b. Calorie-restricted diet.
    c. Clear-liquid diet.

____26. Diabetic diets
a. make use of exchange lists.
b. are nutritionally inadequate.
c. restrict the amount of fat in the diet.

____27. A sodium-restricted diet would not include
a. candy.
b. sausage.
c. cabbage.

____28. A diabetic diet would not include
a. ham.
b. black pepper.
c. jams and jellies.

____29. Which of the following foods would not be included in a bland diet?
a. Macaroni.
b. Cream soups.
c. Broccoli.

Select the letter of the diet which would probably be used for each of the conditions listed in Items 30-36.

CONDITION

____30. Overweight
____31. Liver and gall bladder diseases
____32. Edema
____33. Ulcers
____34. Internal open lesions
____35. A postoperative patient
____36. Difficulty in swallowing

DIETS

a. Bland
b. Calorie-restricted
c. Fat-restricted
d. Liquid
e. Sodium-restricted

UNIT IV TEST

SMALL EQUIPMENT FOR FOOD PREPARATION AND SERVICE

Select the letter of the phrase which correctly completes the statement. Place the letter in the blank next to the statement. Choose only one answer for each item.

_____1. The part of a dipper which measures the food is called the
  a. bowl.
  b. vane.
  c. lever.

_____2. Which of the following is not true in regard to cleaning a dipper?
  a. Wash in warm detergent water.
  b. Rinse in water with an added disinfectant.
  c. Dry with a towel.

_____3. What is the relationship between the number of servings and the number of the dipper size?
  a. The number of the dipper size equals the number of servings per quart.
  b. The number of the dipper size equals the number of servings per pint.
  c. The number of the dipper size equals the number of ounces per serving.

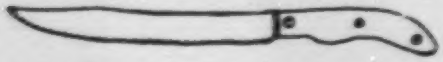
_____4. If you wanted twelve servings per quart, what size dipper would you use?
  a. #6
  b. #12
  c. #24

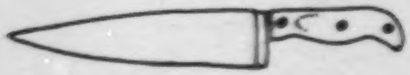
Write in the blank provided the letter of the piece of equipment that should be used for each of the tasks listed in Items 5 through 10.

TASK

_____5. Slicing a pound cake
_____6. Coring lettuce
_____7. Slicing ham
_____8. Paring apples
_____9. Chopping celery
_____10. Cutting sandwiches

EQUIPMENT

A.


B.


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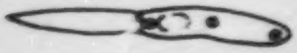

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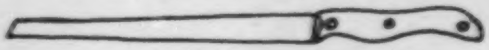
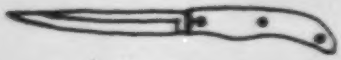


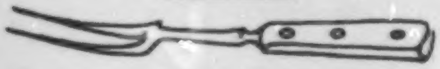
E.


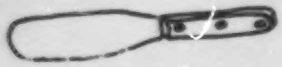
If you were assigned the following tasks, what piece of equipment would you use? Write on your answer sheet the letter of the piece of equipment to be used.

TASK

____11. Scraping mixing bowls
____12. Stirring white sauce
____13. Leveling measurements
____14. Turning a roast
____15. Spreading ham salad sandwiches

EQUIPMENT

A.


B.


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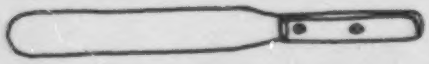

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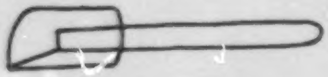
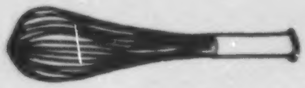


E.


For Items 16 through 19, write in the blank provided the letter of the process which should be used to measure each ingredient. Some processes may be used more than once.

INGREDIENT

____16. Confectioners' sugar
____17. Flour
____18. Vinegar
____19. Shortening

PROCESS

a. Sift and spoon gently into cup
b. Pack firmly into cup
c. Read measurement at eye level

____20. The most accurate method of measuring one cup of milk would be to use a
a. one cup, nested measuring cup.
b. glass measuring cup with a rim.
c. metal measuring cup with a rim.

____21. In quantity food preparation, it is recommended that ingredients
a. always be weighed because it is faster.
b. always be measured because it is more accurate.
c. be weighed when the amounts in the recipe are expressed in ounces or pounds.

____22. The blade of the can opener should be wiped with a damp cloth
a. once each day.
b. after each operation.
c. twice each week.

____23. When operating a can opener, a person should not
a. wipe off the top of the can with a damp cloth.
b. inspect the blade for nicks and grooves.
c. wipe off the base of the can opener with a dry cloth.

UNIT V TEST

LARGE EQUIPMENT FOR FOOD PREPARATION AND SERVICE

Select the letter of the phrase which correctly completes the statement. Place the letter in the blank next to the statement. Choose only one answer for each item.

_____1. Garbage should be fed into a garbage disposal
   a. all at once before the water is turned on.
   b. gradually after the water is turned on.
   c. rapidly after the water is turned on.

_____2. After the grinding has stopped, the garbage disposal should
   a. be turned off immediately.
   b. run for 1 to 2 minutes longer.
   c. run for at least 5 minutes longer.

_____3. For effective dishwashing, dishwashing machines require basic steps of
   a. scraping, pre-washing, and racking.
   b. washing, rinsing, and sanitizing.
   c. both a and b.

_____4. To insure maximum use of the refrigerator, containers should be stored
   a. as close together as possible.
   b. close to the cooling coils.
   c. so air can circulate around them.

_____5. The refrigerator should be defrosted when the frost is
   a. 1/8-inch thick on the coils.
   b. 1/4-inch thick on the coils.
   c. 1/2-inch thick on the coils.

_____6. The bag or cloth filters used in coffee urns should be
   a. rinsed in a strong bleach after using.
   b. stored in a container of fresh cold water.
   c. replaced when they become stained.

_____7. What temperature water should be used to fill both coffee urns and vacuum coffee makers?
   a. Cold
   b. Lukewarm
   c. Hot

_____8. Vacuum coffee makers should be cleaned
   a. twice a week by soaking all parts in a cleansing agent.
   b. after each use with an abrasive cleaner and a brush.
   c. once a week with bleach and hot water.

____9. When making coffee with a vacuum coffee maker,
- a. the water in the lower bowl should be boiling when the top is placed in the lower bowl.
- b. the filter should be removed when the water has been in contact with the coffee for the correct length of time.
- c. the upper bowl should be left in place after the coffee has returned to the lower bowl.

____10. To remove mineral deposits, delime the tea urn
- a. after each use.
- b. once a week.
- c. daily.

____11. Which of the following steps for operating a food slicer is the first step?
- a. Start the motor.
- b. Adjust the indicator.
- c. Slice the food.

____12. When operating a food slicer, one should
- a. remove the blade guard before starting the machine.
- b. use a metal instrument to scrape off food particles.
- c. use warm water when cleaning the slicer.

____13. Food should be added to the food chopper
- a. all at once until the bowl is 1/2 full.
- b. in two additions until the bowl is 3/4 full.
- c. gradually until the bowl is 2/3 full.

____14. To insure cutting food into uniform pieces in a food chopper,
- a. pre-cut food into pieces of the same size.
- b. scrape food down from the outer edge toward bottom of bowl.
- c. remove center portion of food as soon as it is chopped.

____15. Food should be guided into the cutters of a food chopper with
- a. a spoon in the opposite direction that the bowl is turning.
- b. a pusher in the same direction that the bowl is turning.
- c. your hands in either direction.

____16. Food should be removed from the chopper
- a. immediately after the "Stop" button is pushed.
- b. 2 or 3 minutes after pushing the "Stop" button.
- c. after pushing the "Stop" button and removing the blades.

____17. The speed of the mixer is controlled by the
- a. gear control.
- b. "Off" and "On" switch.
- c. wall socket.

____18. When changing the speed of a gear-driven electric mixer,
- a. the clutch lever should be put into neutral before changing speeds.
- b. the machine should be turned off before changing speeds.
- c. simply move the gear to the desired speed.

____19. For best results, the mixer bowl should be filled
a. 1/4 to 1/2 full
b. 1/2 to 2/3 full.
c. 2/3 to 3/4 full.

____20. As a safety precaution during the mixing process, what should be done before using a spatula to scrape the sides of the mixer bowl?
a. Reduce the speed of the mixer and lower the bowl.
b. Lower the bowl and tip the bowl forward.
c. Stop the mixer and lower the bowl.

____21. What temperature should the water be for rinsing egg mixtures or flour batters from the beaters?
a. Lukewarm
b. Cold
c. Hot

____22. Food should be forced through the vegetable hopper by using
a. the cover.
b. the fingers.
c. a pusher.

____23. Which of the following is not true when using a blender?
a. Disconnect the cord when the blender is not in use.
b. Be sure the lid of the blender is fastened tightly.
c. Place very coarse foods and large pieces of ice in the blender.

____24. Water in the steam table tank should be kept at a temperature which will hold the food at a minimum of
a. 120° F. (48° C.).
b. 140° F. (60° C.).
c. 160° F. (72° C.).

____25. In order to prevent bacterial growth, the steam table should be cleaned
a. immediately after the service is completed.
b. at the end of the day.
c. twice a week.

____26. Which of the following statements is not true about the steam table?
a. The steam table helps prevent growth of bacteria.
b. If the water reaches too high a temperature, the food is likely to become overcooked.
c. When containers are placed in the steam table, they should not be covered.

____27. The primary purpose of the bain-marie is to
a. keep food hot at the service counter.
b. cook food to be served at the service counter.
c. complete the cooking process of foods to be served at the service counter.

____28. Which of these statements about the use of the bain-marie is correct?
  a. The steam switch should be turned on 15 to 20 minutes before adding the water.
  b. Water should be drained from the bain-marie at the end of each day.
  c. The water level should be such that the food containers do not float.

____29. The cold food server should be cleaned
  a. daily.
  b. twice a week.
  c. weekly.

____30. The cold food server is used to
  a. chill foods as they are prepared.
  b. keep cold foods chilled during serving.
  c. store leftover food.

UNIT VI TEST

LARGE EQUIPMENT FOR COOKING FOOD

Select the letter of the phrase which correctly completes the statement. Place the letter in the blank next to the statement. Choose only one answer for each item.

_____1. Which of the following is not true when cleaning a toaster?
  a. The cleaning compound or water should not touch the electrical element.
  b. The toaster should be disconnected before it is cleaned.
  c. The outside of toasters should be wiped off with an oil-treated cloth.

_____2. A conveyor toaster should be
  a. plugged in when not in use.
  b. loaded without touching the elements with your fingers.
  c. cleaned once a week.

_____3. The "High" setting on electric and gas ranges should be used
  a. only until the food starts to cook.
  b. until the food is almost cooked.
  c. during the entire cooking time.

_____4. On gas ranges without pilots, you should light the match
  a. after turning on the burner valve.
  b. before turning on the burner valve.
  c. before turning the thermostat as high as possible.

_____5. Seasoning the surface of a grill requires
  a. the use of pumice stone to remove grease and food particles.
  b. the build-up of shortening on a grill until a slick surface is formed.
  c. the addition of salt, pepper, and spices to food on the grill.

_____6. Which of the following is not true when operating an oven?
  a. The oven preheats faster when it is set at a higher temperature.
  b. Avoid excessive opening of oven door to prevent the loss of heat.
  c. Allow the oven to preheat before placing food in the oven.

UNIT VII TEST

TECHNIQUES OF FOOD PREPARATION

Select the letter of the phrase which correctly completes the statement. Place the letter in the blank next to the statement. Choose only one answer for each item.

_____1. Standardized recipes are recommended for use in food service primarily because they
- a. insure that the product is the same each time.
- b. reduce costs of the product.
- c. require less time to prepare.

_____2. Which of the following types of information is not included in a standardized recipe?
- a. Length of cooking time.
- b. Substitutions for ingredients not available.
- c. Number of servings.

Speed and accuracy are important factors in food preparation. Which of the following would help one to develop speed and accuracy?

If your answer is yes, write a in the blank provided.
If your answer is no, write b in the blank provided.

_____3. Read the recipe carefully before beginning.

_____4. Wait to measure ingredients until they are called for in the recipe.

_____5. Estimate the time required for preparation and cooking.

_____6. Check to see that all necessary equipment is available.

_____7. Which of the following is incorrect?
- a. 3 t. = 1 T.
- b. 32 T. = 1 pt.
- c. f.g. = 1/8 t.

_____8. Which one of the substitutions listed below is correct?
- a. 1 whole egg = 3 egg yolks
- b. 1 c. sour milk = 1 c. fresh milk plus 1 T. vinegar or lemon juice
- c. 1 sq. chocolate = 3 T. cocoa

_____9. Betty was assigned to triple a recipe. She used the largest equivalent measures for the ingredients. Which of the following is an incorrect measure?
- a. She used 1 1/4 lbs. of sugar--the recipe called for 8 ozs.
- b. She used 1 T. and 1 1/2 t. of baking powder--the recipe called for 1 1/2 t.
- c. She used 1 pt. of liquid--the recipe called for 2/3 c.

In Items 10 through 13, write in the blank provided the letter of the definition which correctly defines each term.

TERM	DEFINITION
____10. Dice	a. To pulverize
____11. Mince	b. To cut into match-stick strips
____12. Julienne	c. To form tiny flakes
____13. Grate	d. To cut into cubes
	e. To cut into very small pieces

In Items 14 through 17, write in the blank provided the letter of the definition which correctly defines each term.

TERM	DEFINITION
____14. Scald	a. To cook with steam
____15. Simmer	b. To dip into boiling water for a specified time
____16. Blanch	c. To boil until partially cooked
____17. Steam	d. To heat to a temperature of about 185° F. (85° C.)--bubbles break below surface
	e. To heat to a temperature just below boiling

In Items 18 through 21, write in the blank provided the letter of the method of pre-portioning which could be used with each of the foods listed.

FOOD	METHOD OF PRE-PORTIONING
____18. Chocolate cake	a. Standard size pan
____19. Baked custard	b. Standard scoop or dipper
____20. Mashed potatoes	c. Individual baking dish
____21. Cheese	d. Individual carton
	e. Standard slicer

____22. Establishing the size of a portion of food to be served does not
   a. prevent underproduction or overproduction of the food to be served.
   b. complicate the preparation of food.
   c. provide attractive and uniform servings.

____23. Which of the following is not a reason for portioning foods?
   a. To provide leftovers which can be served later.
   b. To provide uniform servings of food.
   c. To provide for production of the appropriate amount of food.

____24. The quality of convenience foods
   a. is usually consistent.
   b. varies from one time to the next.
   c. is inferior to items prepared from "scratch."

____25. The higher cost of convenience foods is balanced by cost reductions in all but one of the following. Which one does not help to balance this cost?
a. The amount of food needed.
b. The amount of labor needed.
c. The amount of equipment needed.

____26. When Jill's employer told her that they were going to use work simplification techniques, he meant that they would need to
a. work faster to complete the job.
b. do the simplest part of the job first.
c. find the easiest way to do the job.

____27. Which of the following is not a step in work simplification?
a. Analyze the job; observe how it is done.
b. Analyze the worker's attitude.
c. Plan the job, avoiding unnecessary waste.

In Items 28 through 31, match the food service task with the rule for motion economy that could be applied when performing the task. Write the letter of the rule in the blank beside the task.

FOOD SERVICE TASK

____28. Filling soup bowls
____29. Cleaning top of the range
____30. Breading pork chops (dipping in flour, eggs, and then crackers)
____31. Placing chopped celery in container

MOTION ECONOMY RULE

a. Use curved motions with natural rhythm.
b. Work hands in unison.
c. Promote proper motion sequence by good location of tools and materials.
d. Free hands and fingers by using devices, tools, or equipment.
e. Use gravity to do work whenever possible.

For Questions 32 through 35, write in the blank provided:

a if the statement is a rule of motion economy.
b if the statement is not a rule of motion economy.

____32. Provide comfortable working heights.

____33. Use music to cover up noise.

____34. Allow rest periods.

____35. Place equipment so levers and controls are in out-of-the-way positions to eliminate safety hazards.

UNIT VIII TEST

FOOD PREPARATION

Select the letter of the phrase which correctly completes the statement. Place the letter in the blank next to the statement. Choose only one answer for each item.

_____1. Coffee that is allowed to stand for a long period of time or is reheated before serving will
   a. acquire a bitter taste.
   b. have a richer flavor.
   c. have no change in flavor.

_____2. To prepare coffee in a coffee urn, boiling water should be poured over the grounds with a
   a. quick, up and down motion.
   b. slow, back and forth motion.
   c. steady, circular motion,

_____3. Coffee should be held at a serving temperature of
   a. 145° F. (63° C.).
   b. 165° F. (74° C.).
   c. 185° F. (85° C.).

_____4. Boiling tea causes it to become
   a. clear.
   b. strong and bitter.
   c. mild in flavor.

_____5. Which of the following is not a characteristic of a quality chocolate beverage?
   a. Well-blended with no sediment.
   b. Consistency similar to coffee or tea.
   c. A rich chocolate flavor.

_____6. Milkshakes are often served to hospital patients
   a. as a treat.
   b. as a stimulant.
   c. as an additional nourishment.

_____7. Ice should not be added to milkshakes because it will
   a. make the milkshake too cold for the patient.
   b. dilute the ingredients.
   c. cause the milkshake to freeze.

_____8. To prevent the sandwich filling from soaking into the bread, spread the bread with
   a. melted butter or margarine.
   b. softened butter or margarine.
   c. butter or margarine thinned with milk.

____9. A recommended motion to use when spreading fillings on sandwiches is
   a. two-stroke technique.
   b. one-stroke technique.
   c. circular technique.

____10. The proper procedure for refrigerating a tray of unwrapped sandwiches is to
   a. cover the tray of sandwiches with moisture-proof wrap paper.
   b. stack the uncovered sandwiches three-deep on the tray.
   c. place the uncovered tray of sandwiches in the refrigerator immediately after preparation.

____11. Eggs cooked at a high temperature are
   a. firm and tender.
   b. hard and tough.
   c. soft and tender.

____12. Eggs function as an emulsifying agent in
   a. mayonnaise.
   b. custards.
   c. souffles.

____13. Egg yolks and egg whites are beaten separately and then combined when preparing a
   a. French omelet.
   b. meringue.
   c. fluffy omelet.

____14. Which of the following is not a technique to use when beating egg whites?
   a. Have the eggs at room temperature.
   b. Use a bowl with a small bottom and sloping sides.
   c. Add a small amount of egg yolk to the egg whites before beating.

____15. A well-cooked cereal
   a. is a tender and free from lumps.
   b. has a slightly starchy flavor.
   c. has a thick pasty texture.

UNIT IX TEST

FUNDAMENTALS OF FOOD SERVICE PROCEDURES

Select the letter of the phrase which correctly completes the statement. Place the letter in the blank next to the statement. Choose only one answer for each item.

_____1. The main reason dining room service is often preferred in a nursing home is that
   a. it is easier for the nursing staff.
   b. it is less expensive for the nursing home.
   c. it gives the residents an opportunity to socialize.

_____2. Which of the following is not true of family style food service in nursing homes?
   a. It is economical because the patient serves himself.
   b. The patient has a variety of foods from which to choose.
   c. Overweight patients may overeat.

_____3. What is the most important reason tray line assembly in hospitals must be carefully planned?
   a. So that the trays can be filled in a minimum amount of time.
   b. So that a minimum number of employees is required.
   c. So that employees can perform the task they like best while assembling the trays.

_____4. Which of the following are not duties of personnel working on the tray line assembly?
   a. To decide which foods to serve for the various diets.
   b. To set up the serving line.
   c. To place food on the trays.

_____5. Information which is not included on the patient's tray card is the
   a. patient's name.
   b. type of diet.
   c. illness (reason for being in the hospital).

_____6. Foods which are to be served hot should be
   a. heated to boiling just before serving.
   b. served on pre-heated plates and dishes.
   c. served uncovered so food does not steam and become soggy.

For Items 7 through 11, match the type of food service with the characteristic which describes the food service.

CHARACTERISTIC	TYPE OF FOOD SERVICE
_____7. Food is loaded into bulks trucks and taken to a floor kitchen.	a. Centralized
_____8. All trays are prepared in the main kitchens.	b. Decentralized

_____9. Trays are prepared in the floor kitchen.

____10. Double-handling of food is eliminated.

____11. Food is more likely to be served at the proper temperature.

UNIT X TEST

SAFETY

Select the letter of the phrase which correctly completes the statement. Place the letter in the blank next to the statement. Choose only one answer for each item.

_____1. Which of the following statements about safety is true?
   a. All accidents could be eliminated.
   b. Accidents due to unsafe conditions could be eliminated.
   c. Accidents due to unsafe acts could be eliminated.

Would each of the types of accidents described in Items 2 through 7, be caused by unsafe acts or unsafe conditions?

> Write a in the blank provided if the accident is a result of unsafe acts.
> Write b in the blank provided if the accident is a result of unsafe conditions.

_____2. James received a shock when he touched an electrical cord before drying his hands.

_____3. While washing dishes in the sink, Betty cut her hand on a paring knife.

_____4. The rung of a stepladder broke when Joe was reaching for some canned food in the storeroom.

_____5. Jill slipped and fell on some spilled food behind the cafeteria counter.

_____6. Juanita was burned when she hit the handle of a pan which was turned toward the outside of the range.

_____7. Armondo was burned when steam escaped from a leak in the steam table.

Write the letter(s) of the kind of fire extinguisher that you would use for the types of fires listed in Items 8 through 14.

TYPES OF FIRES

____8. Paper
____9. Paint
____10. Electrical
____11. Cleaning rags
____12. Grease
____13. Wood
____14. Oil

FIRE EXTINGUISHERS

a. Carbon-Dioxide
b. Dry Chemical
c. Foam
d. Gas Cartridge
e. Pressurized Water
f. Soda-Acid
g. Vaporizing Liquid

UNIT XI TEST

SANITATION

Select the letter of the phrase which correctly completes the statement. Place the letter in the blank next to the statement. Choose only one answer for each item.

_____1. When using a dishwashing machine,
- a. you do not need to scrape dishes before putting them through the machine.
- b. utensils (knives, forks, and spoons) should not be piled in layers in the machine baskets.
- c. the rinse water should be held between 150° and 170° F. (65° and 77° C.).

_____2. Dish towels should not be used for drying dishes because this practice
- a. increases costs.
- b. takes longer.
- c. is unsanitary.

_____3. A general rule to remember when storing perishable foods is to keep foods
- a. at temperatures that will prevent spoilage.
- b. at room temperature.
- c. in original containers.

_____4. Food-borne disease is a general term used to describe
- a. diseases caused by foods.
- b. any food that has been exposed to moisture and warm temperature for several hours.
- c. any illness caused by taking contaminated food or drink into the body.

_____5. Three major "food germ criminals" are
- a. salmonella, bacteria, and ptomaine.
- b. botulinum, salmonella, and staphylococcus.
- c. bacteria, botulinum, and staphylococcus.

_____6. What harmful germ is usually found in meat, eggs, poultry, milk, and milk products?
- a. Salmonella.
- b. Ptomaine.
- c. Streptococci.

_____7. The temperature range during which bacteria grow most rapidly is
- a. 20° to 40° F. (-7° to 5° C.).
- b. 40° to 140° F. (5° to 60° C.).
- c. 140° to 180° F. (60° to 82° C.).

_____8. Which of the following foods becomes easily contaminated in a short period of time?
a. Foods high in fat content.
b. Foods high in sugar content.
c. Foods high in protein content.

_____9. At what temperatures must food be stored to halt or slow the growth of bacteria?
a. Above 140° (60° C.) and below 40° F. (5° C.).
b. Above 100° (38° C.) and below 0° F. (-18° C.).
c. Above 170° (77° C.) and below 50° F. (10° C.).

_____10. One of the main divisions of the U.S. Department of Health, Education, and Welfare which sets up model sanitation codes is the
a. Texas Department of Health.
b. Department of Agriculture.
c. Food and Drug Administration.

_____11. Which of these is a goal of sanitation procedures in health care establishments?
a. Prevention of food spoilage.
b. Preparation of high quality food.
c. Service of food at the proper temperatures.

_____12. The term "sanitizing" differs from cleaning in that sanitizing indicates the
a. absence of soil.
b. removal of harmful bacteria.
c. use of a detergent.

_____13. Failure to clean equipment properly results in
a. poor quality food products.
b. improper functioning of equipment.
c. both a and b.

_____14. When cleaning concrete floors, you should use
a. steel wool and a cleaning solution to remove heavy soil.
b. a solution of neutral soap suds to scrub the floor.
c. an oil mop to sweep the floor.

_____15. Which of the following would be least important when cleaning tables and chairs?
a. Check for remaining sticky spots on the table.
b. Wipe tables daily with a cloth dipped in sanitizing solution.
c. Polish the chairs and tables once a week.

_____16. The most common pests found in food service departments are
a. beetles, weevils, mites and meal moths.
b. roaches, flies, ants, and rodents.
c. roaches, weevils, ants, and flies.

_____17. Pests are eliminated from storage and food service areas by
a. pest control measures taken on a regular basis.
b. proper sanitation and good housekeeping practices.
c. both a and b.

Which of the practices in Items 18 through 25 might lead to food contamination or poisoning?

Write a in the blank provided if the practice is sanitary.
Write b in the blank provided if the practice is to be unsanitary.

____18. Jim reported to work even though he had a deep cough, since the number of employees at his training station was limited.

____19. Sarah used her hands to put the rolls on the serving tray.

____20. Fernando held the glasses near the bottom as he filled them.

____21. Jill had just shampooed and set her hair, so she did not wear her cap that afternoon.

____22. After using a spoon for tasting the pie filling, Thelma put the spoon in the sink.

____23. Greg made the chicken salad and stored it in the refrigerator until just before serving time.

____24. Maria served some leftover custard which had been stored in a warm place for several hours.

____25. After Sam cut his finger, he washed his hands with soap and water and went back to work.

UNIT XII TEST

BASIC SKILLS IN MANAGEMENT

Select the letter of the phrase which correctly completes the statement. Place the letter in the blank next to the statement. Choose only one answer for each item.

_____1. Which of the following is not an advantage of keeping a daily purchase record?
  - a. Helps the supervisor keep up with food cost trends.
  - b. Eliminates the necessity of taking inventories.
  - c. Helps the supervisor locate sources of trouble in food purchasing.

_____2. The major purpose of the meal census is to
  - a. avoid delays and patient inconvenience.
  - b. insure the welfare of the patient.
  - c. aid in figuring the cost of food per person.

_____3. In the dietary department, the meal census is used to
  - a. reguest diet changes for patients.
  - b. determine the cost per person of food served.
  - c. organize the diet orders into types of diets.

Write the letter on your answer sheet of the type of indexing that would be used to file each of the papers listed in Items 4 through 6.

PAPERS

_____4. Mr. Adams--Diet Selection Sheet
_____5. Sodium-restricted Diets
_____6. Del Monte

TYPES OF INDEXING

a. Alphabetical
b. Subject
c. Geographic
d. Numeric

Write the letter on your answer sheet of the procedure which applies to each of the rules of telephone etiquette in Items 7 though 10.

RULES

_____7. Identify yourself.
_____8. Take messages accurately.
_____9. Handle complaints tactfully.
_____10. Take calls for others courteously.

PROCEDURE

a. Remain calm and friendly. Avoid blaming others for mistakes that are made.
b. Be ready to talk as soon as you lift the receiver.
c. Offer the caller a choice between waiting or having his call returned.
d. Give the name of your station and your name.
e. Repeat the information given by the caller to be sure it is correct.

ANSWER KEYS
FOR
UNIT TESTS

ANSWER KEYS
FOR
DIETETIC AIDE

UNIT I	UNIT II	UNIT III	
1. B	1. B	1. A	21. A
2. C	2. C	2. C	22. C
3. C	3. B	3. A	23. B
4. B	4. A	4. C	24. B
5. A	5. B	5. B	25. C
6. B	6. B	6. B	26. A
7. C	7. B	7. C	27. B
	8. A	8. A	28. C
		9. B	29. C
		10. A	30. B
		11. C	31. C
		12. B	32. E
		13. B	33. A
		14. B	34. A
		15. B	35. D
		16. C	36. D
		17. A	
		18. B	
		19. C	
		20. B	

ANSWER KEYS
FOR
DIETETIC AIDE

UNIT IV		UNIT V		UNIT VI
1. A	21. C	1. B	21. B	1. C
2. C	22. B	2. C	22. A	2. B
3. A	23. C	3. C	23. C	3. A
4. B		4. C	24. B	4. B
5. B		5. B	25. A	5. B
6. E		6. B	26. C	6. A
7. D		7. A	27. A	
8. C		8. A	28. C	
9. B		9. A	29. A	
10. D		10. B	30. B	
11. D		11. B		
12. E		12. C		
13. C		13. C		
14. A		14. B		
15. B		15. A		
16. A		16. B		
17. A		17. A		
18. C		18. A		
19. B		19. B		
20. B		20. C		

ANSWER KEYS
FOR
DIETETIC AIDE

UNIT VII		UNIT VIII	UNIT IX	UNIT X
1. A	21. E	1. A	1. C	1. B
2. B	22. B	2. C	2. A	2. A
3. A	23. A	3. C	3. A	3. A
4. B	24. A	4. B	4. A	4. B
5. A	25. A	5. B	5. C	5. B
6. A	26. C	6. C	6. B	6. A
7. C	27. B	7. B	7. B	7. B
8. B	28. B	8. B	8. A	8. B,D,E,F
9. A	29. A	9. A	9. B	9. C
10. D	30. C	10. A	10. A	10. A,B,C
11. E	31. E	11. B	11. A	11. E,F
12. B	32. A	12. A		12. C
13. C	33. B	13. C		13. B,D,E,F
14. E	34. A	14. C		14. C,D
15. D	35. B	15. A		
16. B				
17. A				
18. A				
19. C				
20. B				

ANSWER KEYS
FOR
DIETETIC AIDE

UNIT XI

1. B
2. C
3. A
4. C
5. B
6. A
7. B
8. C
9. A
10. C
11. A
12. B
13. C
14. B
15. C
16. B
17. C
18. B
19. B
20. A
21. B
22. A
23. A
24. B
25. B

UNIT XII

1. B
2. C
3. A
4. B
5. A
6. D
7. E
8. A
9. C
10. B

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FOR USE WITH

INSTRUCTIONAL MATERIALS

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